

US EPA RECORDS CENTER REGION 5



471479

**WW ENGINEERING & SCIENCE
ALBION-SHERIDAN TOWNSHIP LANDFILL SITE
ALBION, MICHIGAN**

**CONSTRUCTION OF
FIELD SUPPORT AREA**

**Subcontract 04011 - No.2
Solicitation No. 2**

WW Engineering & Science



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SECTION 00020

INVITATION TO BID

**WW ENGINEERING AND SCIENCE
CONSTRUCTION OF FIELD SUPPORT AREA**

**Albion-Sheridan Township Landfill Site
Albion, Michigan**

Sealed Bids for:

Construction of Field Support Area

will be recieved by:

**WW Engineering and Science
Attention: Carl A. Malsom**

at the office of:

**WW Engineering and Science
5555 Glenwood Hills Parkway, S.E.
Grand Rapids, MI 49508
Telephone: (616) 942-9600**

until: June 30, 1992 at 4:00 p.m. (Eastern Standard Time)

At which time the Bids will be publicly opened and read aloud at WW Engineering and Science office.

The contract awarded under this Invitation to Bid is funded under a Prime Contract with the U.S. Environmental Protection Agency and all Bidders will be required to comply with the following:

- **Affirmative Action Regarding Utilization of Small Business Concerns, Small Disadvantaged Business Concerns, and Women-Owned Small Business.**
- **Presidential Executive Order 11246 and Equal Employment Opportunity.**
- **Federal Labor Standards and Wage Determination.**

SECTION 00020

INVITATION TO BID

A certified check, bank draft, or Bid Bond in the sum of five percent (5%) of the amount of the Bid will be required with each Bid.

WW Engineering and Science

Carl A. Malsom

- 1.1 Terms used in this Section are defined in the General Conditions.

ARTICLE 1 - FUNDS AVAILABLE

- 1.1 Work to be done will be financed by:
a. The PRIME CONTRACTOR through the Prime Contract with the USEPA.

ARTICLE 2 - BASIS OF PROPOSAL

- 2.1 The proposal is based on a combination of lump sum and unit prices.
- 2.2 The bid amount will be based upon all work being done at Level D Safety protection, although the BIDDER should prepare his bid based upon the ability to upgrade to Modified Level D protection (disposable dust mask respirators) during dusty or windy conditions.
- 2.3 Unit price items in the bid proposal include the estimated quantities of work which will be used as the basis for calculating the bid amount. Payment to the SUBCONTRACTOR will be made on the measurement of work actually performed and the PRIME CONTRACTOR reserves the right to increase or decrease the quantities of any work item as may be necessary.
- 2.4 All work necessary for completion of the Contract, but not specifically listed as a pay item, will be considered to be covered under one or more of the proposal items.
- 2.5 The proposal consists of the unit price and lump sum bid contained in the Bid Form including pages 00300.1 through 00300.5.
- 2.6 PRIME CONTRACTOR may add or delete work in the Contract.

ARTICLE 3 - BID DOCUMENTATION

- 3.1 BIDDER must submit the following fully completed Certifications:
- 3.1.1 Business Classification Certification
 - 3.1.2 Certification Regarding Debarred, Suspended and Ineligible Contractors.
 - 3.1.3 Clean Air and Water Certification
 - 3.1.4 Previous Contracts and Compliance Reports
 - 3.1.5 Certification of Nonsegregated Facilities

ARTICLE 4 - SITE PERMITS AND EASEMENTS

- 4.1 The SUBCONTRACTOR will be required to obtain all necessary State of Michigan, Calhoun County, Sheridan Township Building Permits, or other local highway or road permits. All necessary rights of way, land easements and other interest in land have been secured by the U.S. EPA.

ARTICLE 5 - LABOR STANDARDS

- 5.1 BIDDER shall comply with the Wage Determination included in Section I.53 of the Special Provisions.
- 5.2 BIDDER shall comply in all respects with the Labor Standards Provisions included in Sections I.42 through I.53 of the Special Provisions.

ARTICLE 6 - AWARD OF CONTRACT

- 6.1 The Contract will be awarded or all proposals rejected within 60 days after date of bid opening, subject to EPA approval. Contract Time is amended accordingly.
- 6.2 The contract will be awarded to a single BIDDER.
- 6.3 Bid shall remain firm for 60 days after bid opening.
- 6.4 If the successful Bidder is a Corporation not licensed to do business in the State of Michigan, such license shall be obtained prior to award of Contract.

ARTICLE 7 - PRE-BID MEETING

- 7.1 A pre-bid meeting and site visit is scheduled for June 22, 1992, at 10:00 a.m. Eastern Standard Time. The pre-bid meeting will begin promptly at 10:00 a.m. at the Sheridan Township Hall located at 13355 29 Mile Road, Albion, Michigan, and will be followed with a visit to the project site. Attendance at the pre-bid meeting is mandatory for all BIDDERS and the pre-bid meeting will begin promptly at 10:00 a.m. Bids will not be accepted from BIDDERS that fail to attend the pre-bid meeting or from BIDDERS that arrive after 10:00 a.m. The location of the Sheridan Township Hall is shown on Figure 1 and is located approximately 1-2 miles north of Albion, just north of Interstate 94.

ARTICLE 8 - NOTICE OF SPECIAL CONDITIONS

- 8.1. BIDDER's attention is directed to those parts of contract documents that deal with the following:
1. Section I - Special Provisions including Federal Labor Standards and Wage Determination.
 2. Business Classification Certification
 3. Certification Regarding Debarred, Suspended, and Ineligible Contractors.
 4. Clean Air and Water Certification
 5. Previous Contracts and Compliance Reports
 6. Certification of Nonsegregated Facilities

ARTICLE 9 - QUALIFICATIONS OF BIDDERS

- 9.1 Bids are solicited only from responsible BIDDERS skilled and regularly engaged in work of similar character and magnitude.
- 9.2 Bids will be received only from Prequalified Planholders of Record.

ARTICLE 10 - EXAMINATION OF CONTRACT DOCUMENTS AND SITE

- 10.1 Before submitting a Bid, each BIDDER shall:
- 10.1.1 Examine the Contract Documents thoroughly;
 - 10.1.2 Attend the pre-bid meeting and visit the site to become familiar with the local conditions that may in any manner affect cost, progress, or performance of the Work. A site visit will follow the pre-bid meeting.
 - 10.1.3 Become familiar with all laws, rules and regulations that may in any manner affect cost, progress or performance of the Work; and
 - 10.1.4 Study and carefully correlate BIDDER's observations with the Contract Documents.

SECTION 00100INSTRUCTIONS TO BIDDERS

- 10.2 Surveys and investigation reports of subsurface or latent physical conditions at the site have been relied upon by PRIME CONTRACTOR in preparing the Drawings and Specifications. Copies of such surveys and reports are available for inspection upon request. Those reports are not guaranteed as to accuracy or completeness. Each BIDDER shall, at own expense, make additional surveys and investigations as necessary to determine Bid for the performance of the Work.

ARTICLE 11 - INTERPRETATION

- 11.1 Questions about the meaning or intent of the Contract Documents shall be communicated to PRIME CONTRACTOR not less than 5 days prior to date of opening of Bids. Replies will be issued by Addenda faxed or delivered to Planholders of Record 4 days before Bids are due. Only answers given by Addenda shall be binding. Oral and other interpretations or clarifications shall be without legal effect.

ARTICLE 12 - BID SECURITY

- 12.1 The type and amount of Bid Security is stated in the Invitation to Bid.
- 12.2 Bid Bonds shall be issued by a Surety named in U.S. Treasury Circular 570 licensed to conduct business in the state in which the Work is located. Bid Security from each BIDDER on the Work shall be a Bond or Bonds written by a single Surety. The Bid Security form is outlined in Article 7 in the Bid Section of this document. The Bid Security of the successful BIDDER will be retained until the Agreement is executed.
- 12.2.1 The Bid Security of any BIDDER whom PRIME CONTRACTOR believes to have a reasonable chance of receiving the award may be retained by PRIME CONTRACTOR until either 7 days after the executed Agreement is delivered by PRIME CONTRACTOR to BIDDER or at time limit specified for issuance of Notice of Award, whichever occurs first.
- 12.2.2 Unless specifically requested, Bid Bond will not be returned to BIDDER.

FORFEITURE OF BID SECURITY:

- 12.3 Failure of the successful BIDDER to execute and deliver the Agreement and deliver the required Bonds and insurance certificates within 15 days of the Notice of Award shall be just cause for PRIME CONTRACTOR to annul the Notice of Award and declare the Bid and Bid Security forfeited.

SECTION 00100INSTRUCTIONS TO BIDDERS

- 12.4 Failure to complete Bid documentation and correct minor irregularities in the Bid within 5 days will be cause for forfeiture.

ARTICLE 13 - CONTRACT TIME

- 13.1 The number of days for completion of all Work will be forty-five (45) days and the field support area portion of the work shall be completed within the first twenty-one (21) days. Provisions for liquidated damages and expenses for failure to complete on time are set forth in the Bid and the Agreement

ARTICLE 14 - BID PREPARATION

- 14.1 Submit the Bid on Bid form with Bid Security and other required documents. The bound copy is for BIDDER's records.
- 14.2 Bids shall be carefully prepared in strict accordance with these instructions.
- 14.3 No change shall be made in the wording of the form or in any of the items. Bids should be typed or filled out legibly in ink.
- 14.4 All names must be printed or typed below the signature.
- 14.5 The Bid shall contain an acknowledgement of receipt of all Addenda.
- 14.6 Bid by partnership shall be executed in the partnership name and signed by a partner. Partner's title must appear under signature.
- 14.7 Bid submitted by 2 or more firms will be considered as a joint Bid. Each firm shall be responsible for the total amount of the Bid.
- 14.8 Bid by corporation must be executed in the corporate name by a corporate officer accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be listed.
- 14.9 Agreement will be on the basis of material and equipment described in the Contract Documents without consideration of substitute or "or-equal" items. Applications for substitutions will be considered only after the Agreement has been executed.
- 14.10 Fully completed Certifications as listed in ARTICLE 3 of this SECTION must accompany bid.

ARTICLE 15 - SUBMISSION OF BIDS

- 15.1 Bids, and other required documents shall be submitted prior to the time and at the place indicated in the Invitation to Bid.
- 15.2 Submit Bid Documents, properly identified.
- 15.3 If the Bid Documents are sent through the mail or other delivery system, the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face thereof.

ARTICLE 16 - MODIFICATION AND WITHDRAWAL OF BIDS

- 16.1 Bids may be modified or withdrawn by an appropriate document duly executed and delivered to the place where Bids are to be submitted at any time prior to the opening of Bids.
- 16.2 If, within 24 hours after Bids are opened, any BIDDER files a duly signed notice with the PRIME CONTRACTOR and promptly thereafter demonstrates to the reasonable satisfaction of the PRIME CONTRACTOR that there was a material and substantial mistake in the preparation of Bid, that BIDDER may withdraw Bid, and Bid Security will be returned by PRIME CONTRACTOR.

ARTICLE 17 - OPENING OF BIDS

- 17.1 The Bid opening location and time will be as indicated in the Invitation to Bid.

ARTICLE 18 - REJECTION OF BID AND AWARD OF CONTRACT

- 18.1 BIDDER will be required to complete Bid documentation and correct irregularities as a condition of Award. PRIME CONTRACTOR reserves the right to reject any and all Bids and waive any and all irregularities. PRIME CONTRACTOR further reserves the right to accept or reject nonconforming, qualified and conditional Bids.
- 18.2 In evaluating Bids, PRIME CONTRACTOR will consider the qualifications of the BIDDERS, whether or not the Bids comply with the prescribed requirements.

SECTION 00100INSTRUCTIONS TO BIDDERS

PRIME CONTRACTOR may conduct investigations to establish the responsibility, qualifications and financial ability of the BIDDERS and proposed Subcontractors to do the Work within the prescribed time. PRIME CONTRACTOR reserves the right to reject the Bid of any BIDDER who does not pass such evaluation to PRIME CONTRACTOR'S satisfaction.

- 18.3 Contract will be awarded to the low responsive, responsible BIDDER whose evaluation indicates to PRIME CONTRACTOR that the award will be in the best interest of PRIME CONTRACTOR.
- 18.4 Prior to the Notice of Award, PRIME CONTRACTOR will notify the apparent low BIDDER if PRIME CONTRACTOR, after due investigation, has reasonable objection to any listed subcontractor or supplier. Failure of the PRIME CONTRACTOR to make objection prior to Notice of Award will constitute acceptance but not a waiver of any right of PRIME CONTRACTOR to reject defective work, material or equipment, or material and equipment not in conformance with the requirements of the Contract Documents.
- 18.5 If, prior to the Notice of Award, PRIME CONTRACTOR refuses to accept any Subcontractor, the apparent low BIDDER may:
 - 18.5.1 Submit an acceptable substitute without an increase in Bid Price; or
 - 18.5.2 Withdraw Bid and Bid Security.
- 18.6 If, after Notice of Award, PRIME CONTRACTOR refuses to accept any subcontractor, BIDDER shall submit an acceptable substitute and the Contract Price will be adjusted by the difference in cost occasioned by such substitution.
- 18.7 Concurrently with execution and delivery of Agreement, BIDDER shall deliver to PRIME CONTRACTOR required certificates of insurance as required by the General Conditions.
- 18.8 At least 5 copies of the Agreement and such other documents as required will be signed by PRIME CONTRACTOR and BIDDER within 25 days of the Notice of Award. PRIME CONTRACTOR will sign Agreement within 10 days of receipt of required certificates of insurance, and BIDDER executed Agreement. PRIME CONTRACTOR and BIDDER will each receive an executed copy of the Agreement.

_____, 1992

WW Engineering and Science
5555 Glenwood Hills Parkway, S.E.
Grand Rapids, MI 49508

Construction of Field Support Area
Albion-Sheridan Township Landfill Site
Subcontract 04011 - No. 2

ARTICLE 1-CONTRACT PRICE

- 1.1 Having carefully examined the site of the proposed Work; being fully informed of the conditions to be met in the prosecution and completion of the Work; having read and examined the Project Manual and Drawings applicable to this Work; agreeing to be bound accordingly; the Bidder proposes to perform all services, and furnish all necessary labor, materials, and equipment to complete the construction indicated on the Drawings and described in the Project Manual for the amounts shown on the Unit Price and Lump Sum Bid Form included at the end of this section and as summarized below:

For all work described in the Project Plans and Specifications and specifically summarized in the Field Support Area Project Specifications. This bid price is based on all work performed at level D personal protection, including any periods of modified level D (disposable dust mask respirators).

Bid Price _____ Dollars
(\$ _____)

ARTICLE 2-CONTRACT TIME

- 2.1 If awarded the Contract, BIDDER agrees to prosecute the Work regularly and diligently to insure full completion in forty-five (45) days.
- 2.2 The Undersigned agrees that the amount of liquidated damages shall be the sum of five hundred (\$500.00) for each day that expires after the completion date until the Work is complete.

ARTICLE 3-RECEIPT OF ADDENDA

- 3.1 Receipt of Addenda _____ through _____ is acknowledged.

ARTICLE 4 -BIDDER'S QUALIFICATIONS

- 4.1 The BIDDER agrees to furnish, upon request, a list of projects of a similar nature completed in the last 3 years.

SECTION 00300ARTICLE 5-WAIVER

5.1 The BIDDER certifies the Bid Price is correct and complete and that all information given in or furnished is correct, complete and submitted as intended. The BIDDER waives any right to:

- 5.1.1 Claims he may now have or which may accrue to him.
- 5.1.2 Refuse to execute the Contract if awarded to him.
- 5.1.3 Demand the return of the Bid Security.
- 5.1.4 Be relieved from any obligation by reason of any errors, mistakes or omissions, subject to right of withdrawal of Bid as provided in the Instructions to Bidders.

ARTICLE 6-BID NON-COLLUSIVE

6.1 The BIDDER certifies that this Bid is fair, genuine and not collusive or sham, and has not in any manner, directly or indirectly, agreed or colluded with any other person, firm or association to submit a sham Bid, to refrain from bidding, or in any way to fix the amount of this Bid or that of any other BIDDER, or to secure any advantage against the PRIME CONTRACTOR. The BIDDER further certifies that no officer or employee of the PRIME CONTRACTOR is personally or financially interested, directly or indirectly, in this Bid.

ARTICLE 7-BID SECURITY

7.1 The Bid Security accompanying this Bid is in the following form:

- 7.1.1 Surety Bid Bond _____
- 7.1.2 Certified Check _____
- 7.1.3 Bank Draft _____
- 7.1.4 Cashier's Check _____
- 7.1.5 Sight Draft _____

ARTICLE 8-JOINT BID INFORMATION

8.1 Joint BIDDERS shall complete the following certificate:

8.1.1	Firm Name	City	State
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

SECTION 00300

- 8.1.2 We hereby authorize _____ to sign the bid on behalf of the firms listed:

Signature_____
Firm_____
Signature_____
Firm_____
Signature_____
FirmARTICLE 9-CORPORATE CERTIFICATE

- 9.1 The same officer shall not execute both the Bid and the certificate, unless only one person occupies all corporation offices.

- 9.2 I, _____, certify that I am the _____ of the corporation named as BIDDER herein; that _____, who signed this Bid on behalf of the corporation, was then _____ of the corporation, that the Bid was duly signed and the corporate seal affixed for and in behalf of the corporation by authority of its governing body, and is within the scope of its corporate powers.

Date_____
Signature

- 9.3 If a foreign corporation, the BIDDER states this corporation is qualified to and will register in Michigan.

ARTICLE 10-SIGNATURE OF BIDDER

- 10.1 This Bid is submitted in the name of:

Street_____
City_____
State_____
Zip Code_____
Phone

SECTION 00300

00300.4

BID

10.2 For the stated conditions and price(s), the Undersigned submits this Bid:

Signed this _____ day of _____, 19____.

By _____
(Signature)

(Name printed)

(Title)

UNIT PRICE AND LUMP SUM BID FORM

UNIT PRICE AND LUMP SUM BID FOR FIELD SUPPORT AREA ALBION-SHERIDAN TOWNSHIP LANDFILL SITE

<u>ITEM</u>	<u>REQUIRED METHOD OF PAYMENT</u>	<u>ESTIMATED QUANTITY</u>	<u>UNIT PRICE</u>	<u>EXTENDED TOTAL AMOUNT</u>
1. Field Support Area Work Including Excavation, Grading, Decontamination Pad, Electrical, Telephone, and Fill Material	Lump Sum	1	\$_____	\$_____
2. Chain-Link Fence and Gates				
Seven-Foot Chain-Link Fence as specified	Per Foot	5,000	\$_____	\$_____
Two-Leaf Fence Gates as specified	Each	4	\$_____	\$_____
SUM OF EXTENDED TOTALS AND BID PRICE THAT IS ENTERED ON PAGE 00300.1				\$_____

This Agreement is dated as of this _____ day of _____ in the year 19____, between _____, hereinafter called PRIME CONTRACTOR, and _____, hereinafter called SUBCONTRACTOR.

PRIME CONTRACTOR and SUBCONTRACTOR, in consideration of the mutual covenants set forth herein, agree as follows:

ARTICLE 1 - WORK

- 1.1 SUBCONTRACTOR shall complete the Work as specified or indicated in the Contract Documents, generally described as follows:

Project:	Contract Number
Work:	Number of Addenda

ARTICLE 2 - PRIME CONTRACTOR

- 2.1 The Work has been designed by the firm of WW Engineering and Science, who is the PRIME CONTRACTOR on the Work.

ARTICLE 3 - CONTRACT TIME

- 3.1 The Work shall be completed in _____ days and will be the date stipulated in the Notice to Proceed.
- 3.2 PRIME CONTRACTOR and SUBCONTRACTOR recognize that time is of the essence of this Agreement and that PRIME CONTRACTOR will suffer financial loss if the Work is not completed within the time specified plus any extensions as provided for in the General Conditions. They recognize that the financial loss suffered by PRIME CONTRACTOR in the event that SUBCONTRACTOR fails to complete the Work within the Contract Time would be most difficult to determine accurately in any legal or arbitration proceedings. Instead of requiring such proof, PRIME CONTRACTOR and SUBCONTRACTOR agree that as liquidated damages for delay but not as a penalty SUBCONTRACTOR shall pay PRIME CONTRACTOR five hundred (\$500.00) Dollars for each day that expires after the completion date until the Work is complete.
- 3.3 SUBCONTRACTOR agrees to pay, in addition to liquidated damages, expenses arising from failure to complete the Work within the Contract Time including

SECTION 00500

00500.2
AGREEMENT

expenses for engineering services, attorney's fees, technical services and administration costs.

ARTICLE 4 - CONTRACT PRICE

- 4.1 PRIME CONTRACTOR will pay SUBCONTRACTOR for performance of the Work in accordance with the Contract Documents in current funds as follows:

_____ dollars (\$_____).

ARTICLE 5-PAYMENT APPLICATIONS

- 5.1 PRIME CONTRACTOR, with assistance of SUBCONTRACTOR, will prepare partial and final estimates in accordance with the General Conditions.

ARTICLE 6-PAYMENTS

- 6.1 PRIME CONTRACTOR will make partial and final payments in accordance with the GENERAL CONDITIONS.
- 6.2 All monies not paid when due shall bear interest at the rate of 12% per annum.

ARTICLE 7-CONTRACT DOCUMENTS

- 7.1 The complete Contract between PRIME CONTRACTOR and SUBCONTRACTOR consists of the following:
- 7.1.1 Agreement
 - 7.1.2 Instruction to Bidders
 - 7.1.3 Bid
 - 7.1.4 Notice of Award
 - 7.1.5 General Conditions
 - 7.1.6 Supplemental Conditions
 - 7.1.7 Special Provisions
 - 7.1.8 Specifications
 - 7.1.9 Drawings
 - 7.1.10 Modifications
 - 7.1.11 Addenda (numbers ____ thru ____ inclusive)
 - 7.1.12 Required Certifications

ARTICLE 8-MISCELLANEOUS

- 8.1 Terms used in this Agreement are defined in the General Conditions.

SECTION 00500AGREEMENT

- 8.2 Neither party shall assign or sublet, in whole or in part, any of its rights or obligations, including any monies due, or to become due, under the terms of the Contract Documents without the prior consent of the other party. This paragraph shall not be construed to limit the powers vested in the PRIME CONTRACTOR under the General Conditions.
- 8.3 The PRIME CONTRACTOR and SUBCONTRACTOR each binds itself, successors, assigns and legal representatives to the other party hereto in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- 8.4 The Contract Documents may only be altered, amended, or repealed by a Modification.

ARTICLE 9-CORPORATE CERTIFICATE AND SEAL

- 9.1 SUBCONTRACTOR, if a corporation, shall cause the following certificate to be executed. The same officer shall not execute this Agreement and the certificates unless only one person occupies all corporate offices.

CORPORATE CERTIFICATE

- 9.2 I, _____, certify that I am the _____ of the corporation named as SUBCONTRACTOR herein; that _____, who signed this Agreement on behalf of SUBCONTRACTOR, was then _____ of the corporation; that the Contract was duly signed and the corporate seal affixed for, and in behalf of, said corporation by authority of its governing body and is within the scope of its corporate powers.

(Date)

(Signature)

(CORPORATE SEAL)

SECTION 00500

00500.4
AGREEMENT

ARTICLE 10-SIGNATURES

10.1 IN TESTIMONY WHEREOF, the parties hereto have executed this contract in at least 3 counterparts, each of which shall be deemed an original, the day and year first above written.

WITNESS _____

SUBCONTRACTOR

(Subcontractor)

By _____
(Signature)

Title _____

WITNESS _____

PRIME CONTRACTOR

(Prime Contractor)

By _____
(Signature)

Title _____

APPROVED AS TO FORM:

PRIME CONTRACTOR's Attorney

ARTICLE 1 - DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof:

Act of God -

Unpredictable phenomenon of nature such as earthquake, flood or cyclone.

Addenda -

Additional provisions, changes or clarifications of the Subcontract Documents issued prior to the receipt of bids.

AGENCY -

The U.S. Environmental Protection Agency, or may also be identified as "EPA", "U.S. EPA" or "Government".

Agreement -

An instrument, signed by PRIME CONTRACTOR and SUBCONTRACTOR covering the Work to be performed.

Bid -

The offer or proposal of the BIDDER submitted on the prescribed form setting forth the prices for the Work to be performed.

Bid Documents -

The Bid and required additional documents to be submitted with the Bid.

Bidder -

Any person, firm, joint venture or corporation submitting a Bid for the Work.

Bid Security -

The Bid Bond, certified check, cashier's check or other form of bid security furnished by the SUBCONTRACTOR.

Bonds -

Bid, performance and payment bond and other instruments of security furnished by SUBCONTRACTOR.

Bulletin -

A document issued by PRIME CONTRACTOR which clarifies and interprets the Contract Documents and may initiate Change Orders.

Cash Allowance -

A fixed sum stipulated in the Contract Documents for a specific service, product or group of products. All cash allowances shall be included in the Contract Price.

Certification of Completion -

Notice from PRIME CONTRACTOR to AGENCY that the Work has been completed and establishing a one year bonded correction period.

Change Order -

An order to SUBCONTRACTOR signed by PRIME CONTRACTOR authorizing an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Time or both, issued after execution of the Agreement.

SECTION 00701GENERAL CONDITIONS

Construction Schedule -

The timetable outline of SUBCONTRACTOR's sequence of operations.

Contract -

The Addenda, Agreement, General and Supplementary Conditions, Special Provisions, SUBCONTRACTOR's Bid Documents, post-Bid documentation submitted prior to the Notice of Award, Invitation to Bid, Instructions to Bidders, Bonds, Insurances, Notice to Proceed, Specifications, Drawings, Modifications.

Contract Price -

The total moneys payable to SUBCONTRACTOR for the Work.

Contract Time -

The stated date or number of days for the completion of the Work.

Day -

Calendar day of 24 hours from midnight to the next midnight.

Defective Work -

Work that does not conform to the requirements of the Contract Documents and damaged work.

Drawings -

The Drawings which show the character and scope of the Work to be performed, prepared or approved by PRIME CONTRACTOR.

Effective Date of Contract -

The date shown on the Agreement.

General Requirements -

The Sections of SECTION 01010 - Summary of Work of the Project Specifications.

Health and Safety Program -

The SUBCONTRACTOR's written program which describes the procedures that will assure compliance with local, state, and federal ordinances, rules, regulations, and guidelines concerning occupational health and safety for SUBCONTRACTOR's employees working at the project site.

Insurance Certificate -

The document issued by SUBCONTRACTOR's insurer listing policies and extent of coverage applicable to the Work by SUBCONTRACTOR.

Liens -

Claims, security interests, and encumbrances.

Lower Tier Subcontractor -

An individual, firm, joint venture or corporation having a direct contract with SUBCONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

Modification -

(a) An amendment of the Contract Documents signed by both parties, (b) a Change Order, or (c) Bulletin. A Modification may only be issued after the effective date of the Agreement.

Notice -

A communication between the parties specifically called for by the Contract Documents.

SECTION 00701GENERAL CONDITIONS

Notice of Award -

The Notice by PRIME CONTRACTOR to BIDDER that BIDDER has been awarded the Contract.

Notice of Termination -

Notice from PRIME CONTRACTOR to SUBCONTRACTOR terminating services of the SUBCONTRACTOR.

Notice to Proceed -

A Notice by PRIME CONTRACTOR to SUBCONTRACTOR fixing the date on which the Contract Time will commence and on which SUBCONTRACTOR shall start the Work.

Partial Completion -

For the Work that is being constructed in phases, Partial Completion is substantial completion of a defined portion of the Work. Partial Completion is reached whenever the defined portion of the Work is ready for use. To be considered partially complete, use must not be prevented by other activities of SUBCONTRACTOR. When use is delayed by factors that are beyond SUBCONTRACTOR's control, the designated portion of the Work shall be considered partially complete.

Partial Utilization: -

Partial Utilization is placing a portion of the Work or facility in service for the purpose for which it was intended or for a related use before reaching Partial Completion.

Planholders of Record -

Parties recorded by PRIME CONTRACTOR as having received a copy of Contract Documents and a separate set of Bid Documents.

PRIME CONTRACTOR -

The firm of WW Engineering & Science, Inc., or any of its subsidiaries.

Prime Contract -

The contract between the PRIME CONTRACTOR and the U.S. EPA, Contract No. 68-W8-0079.

Product -

Materials, systems, and equipment incorporated in the Work.

Product Data -

Catalog data, illustrations, standard schedules, performance charts, instructions, and other information prepared by manufacturer or supplier.

Project -

The entire scope of the Work identified in this Agreement.

Project Manual -

The volume or volumes containing the bidding information, schedules, equipment uses, page-size details, and the Contract Documents for the Work except large drawings and modifications.

Provide -

Furnish and install.

SECTION 00701GENERAL CONDITIONS**PRIME CONTRACTOR Project Representative -**

The authorized representative of PRIME CONTRACTOR at the project site or any part thereof.

Shop Drawings -

All drawings, diagrams, illustrations, schedules and other data specifically prepared by SUBCONTRACTOR, a lower tier Subcontractor, manufacturer, fabricator, supplier or distributor to illustrate the equipment, material or some portion of the Work.

Site Safety Plan -

The document which describes the potential hazards at the project site, the required levels of protection for persons working at the project site, and the operational constraints at or near the project site. Also known as the Health and Safety Plan.

Schedule of Values -

The breakdown of Bid into component parts aggregating the Contract Price.

Specifications -

Those portions of the Contract Documents consisting of technical descriptions of materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative details applicable thereto, including specifically all Sections contained therein.

SUBCONTRACTOR -

The person, firm or corporation with whom PRIME CONTRACTOR has executed the Contract.

SUBCONTRACTOR's Affidavit of Completion -

The SUBCONTRACTOR's affidavit that the Work has been completed according to Contract Documents and that labor and material men have been paid.

Supplier -

Firm providing products to SUBCONTRACTOR.

Work -

The entire completed construction and the various separately identified parts thereof required to be furnished under the Contract Documents. Work is the result of performing services, furnishing labor, and furnishing and incorporating products into the construction as required by the Contract Documents.

ARTICLE 2 - PRELIMINARY MATTERS**SUBCONTRACTOR'S REPRESENTATION:**

- 2.1 By executing the Agreement, SUBCONTRACTOR reaffirms that he has visited the site and assumes full responsibility for having familiarized himself with the nature and extent of the Contract Documents, Work, locality, local conditions and availability of manpower, materials and machinery that may in any manner affect the Work to be done.

SECTION 00701GENERAL CONDITIONSARTICLE 3 - CONTRACT DOCUMENTS INTENT AND REUSE INTENT:

- 3.1 All communications between the AGENCY, SUBCONTRACTOR and PRIME CONTRACTOR intended to affect or modify any of the terms or obligations contained in the Contract Documents shall be in writing in order to be valid.
- 3.2 The Contract Documents are complementary; what is called for by one is as binding as if called for by all. In resolving conflicts, errors and discrepancies, the documents shall be given precedence in the following order: Agreement, Modification, Addenda, Supplementary Conditions, Instructions to Bidders, General Conditions, Special Provisions, Specifications and Drawings. Detailed drawings shall govern over general Drawings. Any work that may reasonably be inferred from the Specifications or Drawings as being required to produce the intended result shall be supplied whether or not it is specifically called for. Work, materials or equipment described in words which, so applied, have a well-known technical or trade meaning shall be deemed to refer to such recognized standards or meanings.
- 3.3 The Contract Documents shall be governed by the law of the State of Michigan.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE CONDITIONS;
REFERENCE POINTSGENERAL:

- 4.1 The SUBCONTRACTOR shall be responsible for obtaining all necessary State of Michigan, Calhoun County, or other local highway or road permits. Under provisions of the Prime Contract, the AGENCY shall obtain all necessary rights of way, land easements and any other interest in land necessary to complete the Work. The PRIME CONTRACTOR will notify SUBCONTRACTOR of site access when it is available, but PRIME CONTRACTOR has no other responsibility or liability to SUBCONTRACTOR or any lower tier Subcontractor for site access or any delays relating to site access.

UNFORESEEN SUBSURFACE CONDITIONS:

- 4.2 The underground conditions indicated in the Contract Documents represent the best information available at the time of Drawing preparation and is not guaranteed. SUBCONTRACTOR shall promptly notify PRIME CONTRACTOR in writing of any subsurface or latent physical conditions at the site differing materially from those indicated in the

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Contract Documents. PRIME CONTRACTOR will promptly investigate those conditions. If PRIME CONTRACTOR finds that the results of such surveys or tests indicate subsurface or latent physical conditions differing significantly from those indicated in the Contract documents, a Change Order will be issued incorporating the necessary revisions.

ARTICLE 5 - INSURANCEINSURANCE REQUIREMENTS:

- 5.1 SUBCONTRACTOR shall purchase and maintain such comprehensive general liability and other insurance from an insurance company authorized to write casualty insurance in the state where the work is located as shall provide protection from claims which may arise out of, or result from, SUBCONTRACTOR's performance of the Work and SUBCONTRACTOR's other obligations under the Contract Documents, whether such performance is by SUBCONTRACTOR, by any lower tier Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable.

5.1.1 Certificates of insurance shall contain a provision that coverage afforded under the policies shall not be cancelled or materially changed until at least 10 days prior written notice has been given to the PRIME CONTRACTOR. Sufficient certificates of insurance or certified copies of policies shall be submitted for inclusion in each of the executed Contract Documents.

- 5.2 This insurance shall be written for the following minimum limits of liability and shall have an endorsement covering all the SUBCONTRACTOR's contractual obligations.

5.2.1 Workman's Compensation and occupational disease insurance in amounts to satisfy State law.

5.2.2 Public Liability, Bodily Injury and Property Damages:

Injury or death of one person	\$ 500,000
Injury to more than one person in a single accident	\$1,000,000
Property damage, each accident	\$ 500,000
Property damage, aggregate operation	\$1,000,000

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The comprehensive general liability insurance shall include completed operations insurance. Where the project includes underground construction, the policy shall specifically provide a statement that it includes underground hazards, collapse and explosion.

5.2.3 Automobile and Truck Liability, Bodily Injury and Property Damages:

Injury or death of one person	\$ 250,000
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Injury to more than one person in a single accident	\$ 500,000
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Property Damage, each accident	\$ 100,000
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5.2.4 Umbrella (Extended Risk) Policy:

The umbrella policy shall include coverage at least as broad as the primary or underlying policies and shall apply to both General Liability and Automobile Liability Insurance.

Umbrella Policy	\$2,000,000
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ARTICLE 6 - SUBCONTRACTOR'S RESPONSIBILITIESGENERAL:

- 6.1 SUBCONTRACTOR will issue communications relative to the Work to PRIME CONTRACTOR.
- 6.2 SUBCONTRACTOR shall supervise the Work efficiently and with skill and attention. He shall be solely responsible for the means, methods, techniques, sequences and procedures of construction. SUBCONTRACTOR shall be responsible for accurate compliance of the finished Work with the Contract Documents.
- 6.3 All materials, and products shall be of good quality and new. When required by PRIME CONTRACTOR, SUBCONTRACTOR shall furnish satisfactory evidence as to the kind and quality of materials and installed equipment.
- 6.4 SUBCONTRACTOR shall be fully responsible for all acts and omissions of his lower tier Subcontractors and of persons directly or indirectly employed by them and persons for whose acts any of them may be liable

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to the same extent that SUBCONTRACTOR is responsible for the acts and omissions of persons directly employed by SUBCONTRACTOR.

- 6.5 All Work performed for SUBCONTRACTOR by a lower tier Subcontractor shall be pursuant to an appropriate agreement between SUBCONTRACTOR and the lower tier Subcontractor which specifically binds the lower tier Subcontractor to the applicable terms and conditions of the Contract Documents.

PATENT FEES AND ROYALTIES:

- 6.6 SUBCONTRACTOR shall pay all license fees, royalties and costs incident to the use of any invention, design, process or device which is the subject of patent rights or copyrights in connections with the Work.

INDEMNIFICATION:

- 6.7 SUBCONTRACTOR shall indemnify and hold harmless AGENCY and PRIME CONTRACTOR, their agents and employees, from and against all liability claims, damages, losses and expenses arising out of, or resulting from, the negligent performance of the Work, provided that any such claim, damage, loss or expense:
- 6.7.1 Is attributable to bodily injury, sickness, disease or death, or to injury to, or destruction of, tangible property, and
 - 6.7.2 Is caused by any negligent act or omission of SUBCONTRACTOR, and lower tier Subcontractors, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable.
- 6.8 In all claims against AGENCY or PRIME CONTRACTOR or their agents or employees by any employee of SUBCONTRACTOR or lower tier Subcontractors, or anyone for whose acts AGENCY or PRIME CONTRACTOR may be liable, the indemnification obligation shall not be limited by the amount or type of damages, compensation or benefits under Workman's compensation acts, disability benefit acts, or other employee benefit acts.
- 6.9 In the event that any part of the indemnification obligation of SUBCONTRACTOR is declared illegal or unenforceable under existing or future law, it is the intention of SUBCONTRACTOR that such part shall be severed from the remainder of these General Conditions and that the remaining indemnification obligation of SUBCONTRACTOR be enforced to the maximum extent permitted by law.

SAFETY AND PROTECTION:

- 6.10 In accordance with the PRIME CONTRACTOR's Health and Safety Plan (also referred to as Site Safety Plan) all personnel, including all SUBCONTRACTOR personnel and lower tier Subcontractor personnel, that perform on-site work must have successfully completed the 40 hour health and safety training, and 8 hour/year refresher course as outlined in 29 CFR Part 1910.120 and all on-site work must be done in accordance with the procedures contained in the Health and Safety Plan which is attached to and made part of this Agreement.
- 6.11 In accordance with the SUBCONTRACTOR'S Health and Safety Program, SUBCONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. He shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
- 6.11.1 all SUBCONTRACTOR employees on the Work and other persons who may be affected thereby;
 - 6.11.2 all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site; and
 - 6.11.3 other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 6.12 SUBCONTRACTOR shall comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction for the safety of persons or property or to protect them from damages, injury or loss. SUBCONTRACTOR shall erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection, and in addition SUBCONTRACTOR shall comply with all applicable requirement of the U.S. Department of Labor Occupational Safety and Health Act, any equivalent state law, and all other applicable federal, state, county, and local laws, ordinances, codes, and regulations. SUBCONTRACTOR understands that the nature of the work to be performed under this agreement is potentially hazardous and he shall read, understand, and fully comply with the Health and Safety Plan provided by the PRIME CONTRACTOR and which is attached to and made part of this Agreement.

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- 6.13 SUBCONTRACTOR shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be SUBCONTRACTOR's superintendent unless otherwise designated by SUBCONTRACTOR.

EMERGENCIES:

- 6.14 In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, SUBCONTRACTOR, without special instruction or authorization from PRIME CONTRACTOR, is obligated to act, at his discretion, to prevent threatened damage, injury or loss. He shall give PRIME CONTRACTOR prompt written notice of any potential significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order may thereupon be issued in the discretion of the PRIME CONTRACTOR covering the changes and deviations involved.

MEDICAL AND SAFETY TRAINING CERTIFICATION:

- 6.15 SUBCONTRACTOR shall provide to PRIME CONTRACTOR a certification for each employee assigned to the project site that said employee participates in an annual medical monitoring program and has been medically certified by a physician for this work, including the use of a full face respirator, and has been trained for work in environments with known or unknown hazardous wastes. This certification must be provided before an employee can enter the job site.

ARTICLE 7 - WORK BY OTHERS

- 7.1 AGENCY and PRIME CONTRACTOR may perform additional work related to the Project by themselves, or by direct contracts with others. SUBCONTRACTOR shall also carefully coordinate and cooperate with AGENCY and PRIME CONTRACTOR and other SUBCONTRACTOR's.

ARTICLE 8 - PRIME CONTRACTOR'S STATUS DURING CONSTRUCTIONVISITS TO SITE:

- 8.1 AGENCY, PRIME CONTRACTOR or others authorized by PRIME CONTRACTOR, will make visits to the site at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. PRIME CONTRACTOR will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work.

CLARIFICATIONS AND INTERPRETATIONS:

- 8.2 PRIME CONTRACTOR may issue clarifications or interpretations consistent with, or reasonably inferable from, the intent of the Contract Documents.

REJECTING DEFECTIVE WORK:

- 8.3 PRIME CONTRACTOR will have the authority to disapprove of or reject defective work.
- 8.4 PRIME CONTRACTOR shall not be responsible for the construction means, methods, techniques, sequences or procedures, or the Health and Safety Program incident thereto, and PRIME CONTRACTOR shall not be responsible for the SUBCONTRACTOR'S failure to perform the Work in accordance with the Contract Documents.
- 8.5 PRIME CONTRACTOR shall not be responsible for the acts, errors or omissions of the SUBCONTRACTOR, or any lower tier Subcontractors, or any of his or their agents or employees, or any other persons performing any of the Work.

DECISIONS ON DISAGREEMENT:

- 8.6 PRIME CONTRACTOR will be initial interpreter of the requirements of Contract Documents and judge of acceptability of Work thereunder. Claims, disputes, and other matters pertaining to execution and progress of Work shall be referred initially to PRIME CONTRACTOR with a request for a formal decision.
- 8.7 The rendering of a decision by PRIME CONTRACTOR with respect to any such claim, dispute or other matter, will be a condition precedent to arbitration. The PRIME CONTRACTOR'S decision shall become final and binding on the parties unless an arbitration request is filed within 30 days after the decision is rendered.

LIMITATIONS ON PRIME CONTRACTOR'S RESPONSIBILITIES:

- 8.8 Neither PRIME CONTRACTOR'S authority to act under this Article 8 nor any decision made by him in good faith either to exercise or not exercise such authority shall give rise to any duty, liability or responsibility of PRIME CONTRACTOR to SUBCONTRACTOR, any lower tier Subcontractor, any of their agents or employees or any other person performing any of the Work.

ARTICLE 9 - CHANGES IN THE WORK

- 9.1 Without invalidating the agreement, PRIME CONTRACTOR may, at any time, and for any reason, including changes in the Prime Contract made at the request of the AGENCY, order additions, deletions or revision in Work by Change Orders. Upon receipt of a Change Order, SUBCONTRACTOR shall proceed with the Work involved.
- 9.2 PRIME CONTRACTOR may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents.

ARTICLE 10 - CHANGE OF CONTRACT PRICE

- 10.1 The Contract Price may be changed only by a Change Order.

ARTICLE 11 - CHANGE OF THE CONTRACT TIME

- 11.1 The Contract Time may only be changed by a Change Order. Any claim for an extension of Contract Time shall be delivered to PRIME CONTRACTOR within fifteen (15) days of the event giving rise to the claim. Adjustment, if any, in the Contract Time will be determined by PRIME CONTRACTOR.
- 11.2 The Contract Time will be extended in an amount equal to time lost due to unreasonable time delays beyond the control and without the fault or negligence of SUBCONTRACTOR. Such delays shall be restricted to: acts of neglect by PRIME CONTRACTOR, fires, labor disputes, epidemics, abnormal weather conditions, or Acts of God.

ARTICLE 12 - WARRANTY AND GUARANTEE: TESTS AND INSPECTIONS;
CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

WARRANTY AND GUARANTEE:

- 12.1 SUBCONTRACTOR warrants and guarantees to PRIME CONTRACTOR that all materials and equipment shall be new and that all Work shall be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents. All Work not conforming to the requirements of the Contract Documents shall be considered Defective Work.

TESTS AND INSPECTIONS:

- 12.2 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to be inspected, tested, or approved by someone other than SUBCONTRACTOR, SUBCONTRACTOR shall give PRIME CONTRACTOR timely notice of readiness therefore. All such tests shall be in accordance with the methods prescribed by the applicable organization or Contract Documents. All certification fees, testing laboratory fees, and inspection fees of said public authorities will be paid by PRIME CONTRACTOR.
- 12.3 PRIME CONTRACTOR, his representatives, and representatives of AGENCY shall at all times have access to the Work. SUBCONTRACTOR shall provide proper facilities for access, observation of the Work, and for any inspection or testing by others.

CORRECTION OR REMOVAL OF DEFECTIVE WORK:

- 12.4 SUBCONTRACTOR shall promptly, as specified by PRIME CONTRACTOR, either correct any Defective Work or remove it from the site and replace it with nondefective work. If SUBCONTRACTOR does not correct or remove and replace such Defective Work within a reasonable time, PRIME CONTRACTOR may have the deficiency corrected or the rejected work removed and replaced by others. All direct and indirect costs of such correction or removal, and replacement including compensation for additional PRIME CONTRACTOR'S services, shall be paid by SUBCONTRACTOR. SUBCONTRACTOR shall also repair all work of others destroyed or damaged by replacement of his Defective Work.

ONE YEAR CORRECTION PERIOD:

- 12.5 If, prior to the expiration of one year after the date of Certification of Completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be Defective Work, SUBCONTRACTOR shall promptly correct such Defective Work or remove it from the site and replace it with non-defective Work, in accordance with Section 12.4.

ARTICLE 13 - PAYMENTS AND COMPLETION

- 13.1 SUBCONTRACTOR shall submit invoices to PRIME CONTRACTOR on a monthly basis for work completed during the previous month. Such

SECTION 00701GENERAL CONDITIONS

invoices shall be submitted within ten (10) days of the close of each monthly reporting period. Each invoice must be broken down by unit prices and quantities of work accomplished during the previous month. Invoices that are not complete will be rejected and returned for revision prior to processing. All invoices deemed complete will be processed for payment. If specific costs in the invoice are questioned or need further documentation, only those questioned items will be withheld while the remainder of the invoice is processed for payment.

- 13.2 It is the payment policy of PRIME CONTRACTOR to reimburse SUBCONTRACTOR for approved invoices or partial invoices, within thirty (30) working days, after receiving the invoice from the SUBCONTRACTOR. For the purposes of this agreement, "invoice payment" shall be considered as being made on the day a check is dated. Interest will be paid on any amounts not paid in accordance with this policy at a rate of 1% per month commencing with the final date payment is due.
- 13.3 Final payment for each work task assignment will not be made until all final reports and supporting data have been delivered to and accepted by PRIME CONTRACTOR. The amount withheld for this final payment will not exceed 5% of the total cost of the authorized work task.
- 13.4 Monthly progress payments will be approximately 90% of the Work completed, less the total of previous payments. After construction is 50% complete, and provided SUBCONTRACTOR'S progress is in accordance with the approved construction schedule, PRIME CONTRACTOR will increase the percentage of progress payments to 95% of the Work completed less the total of previous payments.
- 13.5 PRIME CONTRACTOR may refuse to recommend any payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary to protect PRIME CONTRACTOR from loss because:
 - 13.5.1 The Work is Defective Work or completed Work has been damaged requiring correction or replacement.
 - 13.5.2 Claims have been filed or there is reasonable evidence indicating the probable filing thereof.
 - 13.5.3 The Contract Price has been reduced by a Change Order.

13.5.4 SUBCONTRACTOR has been required to correct Defective Work or complete neglected work.

13.5.5 Unsatisfactory prosecution of the Work, including failure to clean up project site.

FINAL PAYMENT:

13.6 After SUBCONTRACTOR has remedied all defects and delivered all documents required by the Contract Documents, PRIME CONTRACTOR will prepare the final payment. SUBCONTRACTOR shall furnish an affidavit that labor, services, material and equipment for which a lien could be filed, and that all payrolls, material and equipment bills, and other indebtedness connected with the Work for which the PRIME CONTRACTOR and AGENCY or his property might in any way be responsible, have been paid or otherwise satisfied and at the discretion of the PRIME CONTRACTOR, lien waivers from all lower tier Subcontractors. If payment bond is required under this Agreement, consent of the surety is required before final payment will be made.

SUBCONTRACTOR'S CONTINUING OBLIGATION:

13.7 The duties and obligations imposed on SUBCONTRACTOR by these General Conditions, and the rights and remedies available hereunder, and the rights and remedies available to AGENCY and PRIME CONTRACTOR thereunder, shall be in addition to, and not a limitation of, any otherwise imposed or available by law, by special guarantee, or other provisions of the Contract Documents.

WAIVER OF CLAIMS:

13.8 The making and acceptance of final payment shall constitute:

13.8.1 A waiver of all claims by SUBCONTRACTOR against PRIME CONTRACTOR, except those claims under negotiation or in arbitration.

13.9 SUBCONTRACTOR's refusal to accept the final payment as tendered by PRIME CONTRACTOR shall constitute a waiver of any right to interest thereon.

LIQUIDATED DAMAGES:

13.10 PRIME CONTRACTOR will invoice SUBCONTRACTOR the amount of the liquidated damages and expenses assessed. If the amounts due are not

paid, the PRIME CONTRACTOR will deduct the amount of any moneys due or to become due SUBCONTRACTOR.

ARTICLE 14 - SUSPENSION OF WORK AND TERMINATION

14.1 PRIME CONTRACTOR may terminate if SUBCONTRACTOR:

14.1.1 (a) Makes a general assignment for the benefit of his creditors, or (b) a trustee or receiver is appointed for SUBCONTRACTOR or for any of his property, or (c) files a petition to take advantage of any debtor's act, or to reorganize under bankruptcy or similar laws; or

14.1.2 Repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment; or

14.1.3 Repeatedly fails to make prompt payments to the lower tier Subcontractors or for labor, materials and equipment; or

14.1.4 Disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction; or

14.1.5 Disregards the authority of PRIME CONTRACTOR, or otherwise violates substantial provisions of the Contract Documents.

14.2 Then PRIME CONTRACTOR may, without prejudice to any other right or remedy and after giving SUBCONTRACTOR and his surety 10 days' written notice, terminate the services of SUBCONTRACTOR. PRIME CONTRACTOR shall have the absolute right to complete the Work in the most expeditious manner, regardless of cost.

14.3 If the surety does not resume performance of the Work within 10 days, AGENCY may take possession of the Work and of all materials, equipment and machinery thereon owned by SUBCONTRACTOR, and finish the Work. SUBCONTRACTOR shall receive no further payment until the Work is finished.

14.4 The PRIME CONTRACTOR may order the SUBCONTRACTOR in writing to suspend, delay, or interrupt all or part of the work at any time and for any period of time for the convenience of the PRIME CONTRACTOR or AGENCY.

SUBCONTRACTOR'S CONTINUING WORK DURING DISPUTES:

- 14.5 SUBCONTRACTOR shall carry on the Work and maintain the Construction Schedule during all disputes or disagreements with PRIME CONTRACTOR. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as SUBCONTRACTOR and PRIME CONTRACTOR may otherwise agree.

ARTICLE 15 - ARBITRATION

- 15.1 In the event that a claim, dispute or other question arises relating to the Contract Documents, except claims which have been waived by the making or acceptance of final payment, PRIME CONTRACTOR and SUBCONTRACTOR may, by mutual agreement, submit the claim, dispute or matter to arbitration.

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1.01 LAWS AND REGULATIONS:

- A. Notice and Compliance: All laws, ordinances, rules and regulations which are applicable to the Work.
- B. Variance: When the specifications are in variance to the laws and regulations, the SUBCONTRACTOR shall promptly serve written notice to the PRIME CONTRACTOR. Any alterations will be made by modification.
- C. When work is performed contrary to laws and regulations, without notice to the PRIME CONTRACTOR, all costs will be borne by the SUBCONTRACTOR.

1.02 PERMITS:

- A. Any permits and licenses necessary for the work shall be obtained by the SUBCONTRACTOR.

1.03 TAXES:

- A. Sales, consumer, use and other similar taxes required for the work shall be paid by the SUBCONTRACTOR.

1.04 LABOR, MATERIALS, AND EQUIPMENT:

- A. SUBCONTRACTOR shall provide competent, suitable qualified personnel to lay out the work and perform construction as required by the contract Documents. He shall at all times maintain good discipline and order at the site. PRIME CONTRACTOR may judge the competency and qualifications of personnel and, upon his written request to the SUBCONTRACTOR, cause the immediate dismissal from the Work of any incompetent and unqualified personnel.
- B. SUBCONTRACTOR shall guarantee that he has available the quantities and quality of labor and supervising necessary to fulfill the contractual obligations beyond any union manpower pool.

SECTION 00800SUPPLEMENTAL CONDITIONS

- C. SUBCONTRACTOR shall furnish all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, water, and all other facilities and incidentals necessary for the execution, testing initial operation, and completion of the Work.
- D. SUBCONTRACTOR shall provide personnel who have been safety trained in accordance with OSHA regulations as described in 29CFR1910.120. PRIME CONTRACTOR shall provide a Site Safety Plan by which SUBCONTRACTOR's personnel will abide. PRIME CONTRACTOR will provide a Site Safety Coordinator to monitor for the presence of potentially hazardous materials and advise the SUBCONTRACTOR of appropriate personal protection required based upon the provisions in the Site Safety Plan.

1.05 ALLOWANCES:

- A. SUBCONTRACTOR shall include all cash allowances so named in the Contract Documents. Upon final payment, allowances will be adjusted, based upon delivered material and equipment invoices of the specific allowance items. All other increased or extra costs will not be allowed.

1.06 TEMPORARY FACILITIES:

- A. SUBCONTRACTOR shall provide any necessary temporary facilities, such as; portable toilets, drinking water, lights and electrical power, etc. that may be required by employees of the SUBCONTRACTOR or any lower tier Subcontractors.

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SECTION I - SPECIAL PROVISIONS

I.1 Organizational Conflicts of Interest

(a) The SUBCONTRACTOR warrants that, to the best of its knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the SUBCONTRACTOR has disclosed all such relevant information.

(b) The SUBCONTRACTOR agrees that if an actual or potential organizational conflict of interest is discovered the SUBCONTRACTOR will make a full disclosure in writing to the PRIME CONTRACTOR Program Manager. This disclosure shall include a description of actions which the SUBCONTRACTOR has taken or proposes to take, after consultation with the PRIME CONTRACTOR Program Manager, to avoid, mitigate, or neutralize the actual or potential conflict.

(c) Remedies - PRIME CONTRACTOR may terminate this Agreement for convenience, in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the SUBCONTRACTOR was aware of a potential organizational conflict of interest prior to execution of this Agreement or discovered an actual or potential conflict after execution of this Agreement and did not disclose or misrepresented relevant information to the PRIME CONTRACTOR Program Manager, PRIME CONTRACTOR may terminate the Agreement for default, or PRIME CONTRACTOR pursue such other remedies as may be permitted by law or this Agreement. Likewise, if PRIME CONTRACTOR terminates this Agreement, it has the right to recovery of any damages from SUBCONTRACTOR that may have resulted from this termination.

(d) The SUBCONTRACTOR further agrees to insert in any second tier subcontract or consultant agreement hereunder, provisions which shall conform substantially to the language of this clause, including this paragraph (d).

I.2 Screening Business Information for Claims of Confidentiality

(a) Whenever collecting information under this Agreement, the SUBCONTRACTOR agrees to comply with the following requirements:

(1) If the SUBCONTRACTOR collects information from public sources, such as books, reports, journals, periodicals, public records, or other sources that are available to the public without restriction, the SUBCONTRACTOR shall submit a list of these sources to the PRIME CONTRACTOR Program Management Office at the time the information is initially submitted to PRIME

CONTRACTOR. The SUBCONTRACTOR shall identify the information according to source.

(2) If the SUBCONTRACTOR collects information from a State or local Government or from a Federal agency, the SUBCONTRACTOR shall submit a list of these sources to the PRIME CONTRACTOR Program Management Office at the time the information is initially submitted to the PRIME CONTRACTOR. The SUBCONTRACTOR shall identify the information according to source.

(3) If the SUBCONTRACTOR collects information directly from a business or from a source that represents a business or businesses, such as a trade association:

(i) Before asking for the information, the SUBCONTRACTOR shall identify itself, explain that it is performing contractual work for a prime contractor to the Environmental Protection Agency, identify the information that it is seeking to collect, explain what will be done with the information, and give the following notice:

(A) You may, if you desire, assert a business confidentiality claim covering part or all of the information. If you do assert a claim, the information will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR Part 2, Subpart B.

(B) If no such claim is made at the time this information is received by the SUBCONTRACTOR, it may be made available to the public by the Environmental Protection Agency without further notice to you.

(C) The SUBCONTRACTOR shall, in accordance with FAR Part 9, execute a written agreement regarding the limitations of the use of this information and forward a copy of the agreement to the PRIME CONTRACTOR Program Manager who in turn will forward it to the EPA Contracting Officer.

(ii) Upon receiving the information, the SUBCONTRACTOR shall make a written notation that the notice set out above was given to the source, by whom, in what form, and on what date.

(iii) At the time the SUBCONTRACTOR initially submits the information to the PRIME CONTRACTOR Program Management Office, the SUBCONTRACTOR shall submit a list of these sources, identify the information according to source, and indicate whether the source made any confidentiality claim and the nature and extent of the claim.

(b) The SUBCONTRACTOR shall keep all information collected from nonpublic sources confidential in accordance with the clause in this Agreement entitled "Treatment of Confidential Business Information" as if it had been furnished to the SUBCONTRACTOR by EPA.

(c) The SUBCONTRACTOR agrees to obtain the written consent of the PRIME CONTRACTOR Program Manager, after a written determination by the Program Management Office, prior to entering into any second tier subcontract or consultant agreement that will require the subcontractor or consultant to collect information. The SUBCONTRACTOR agrees to include this clause, including this paragraph (c), and the clause entitled "Treatment of Confidential Business Information" in all second tier subcontracts or consultant agreements awarded pursuant to this Agreement that require the consultant collect information.

I.3 Treatment of Confidential Business Information

(a) The PRIME CONTRACTOR Program Manager, after a written determination by the EPA Contracting Office may disclose confidential business information to the SUBCONTRACTOR necessary to carry out the Work required under this Agreement. The SUBCONTRACTOR agrees to use the confidential information only under the following conditions:

(1) The SUBCONTRACTOR and SUBCONTRACTOR's employees shall: (i) use the confidential information only for the purposes of carrying out the Work required by this Agreement; (ii) not disclose the information to anyone other than PRIME CONTRACTOR or EPA employees without the prior written approval of the Assistant General Counsel for Contracts and Information Law; and (iii) return to the PRIME CONTRACTOR Program Manager and then to the Contracting Officer all copies of the information, and any abstracts or excerpts therefrom, upon request by the PRIME CONTRACTOR Program Manager, whenever the information is no longer required by the SUBCONTRACTOR for the performance of the Work required under this agreement, or upon completion of the Work under this Agreement.

(2) The SUBCONTRACTOR, using PRIME CONTRACTOR's Confidentiality Form, shall obtain a written agreement to honor the above limitations from each of the SUBCONTRACTOR's employees who will have access to the information before the employee is allowed access.

(3) The SUBCONTRACTOR agrees that these agreement conditions concerning the use and disclosure of confidential information are included for the benefit of,

and shall be enforceable by, both EPA and any affected business having a proprietary interest in the information.

(4) The SUBCONTRACTOR shall not use any confidential information supplied by PRIME CONTRACTOR or EPA or obtained during performance hereunder to compete with any business to which the confidential information relates.

(b) The SUBCONTRACTOR agrees to obtain the written consent of the PRIME CONTRACTOR Program Manager, after a written determination by the Contracting Officer, prior to entering into any second tier subcontract or consultant agreement that will involve the disclosure of confidential business information by the SUBCONTRACTOR to the second tier subcontractor or consultant. The SUBCONTRACTOR agrees to include this clause, including this paragraph (b), in all second tier subcontracts or consultant agreements awarded, pursuant to this Agreement, that require the furnishing of confidential business information to a second tier subcontractor or consultant.

I.4 Limitation on Future Contracting

Due to the scope and nature of this Agreement, the SUBCONTRACTOR shall observe the following restrictions on future hazardous waste site contracting for the duration of the Agreement or as otherwise specified:

(1) The SUBCONTRACTOR will be ineligible to compete for remedial action projects for which the SUBCONTRACTOR has developed or contributed to the solicitation package.

(2) The SUBCONTRACTOR, for a period of three (3) years after the completion of the Work under this Agreement, agrees not to compete for or to represent a private party on any work pertaining to a specific site at which the SUBCONTRACTOR previously performed for the PRIME CONTRACTOR under this Agreement without the prior written approval of the PRIME CONTRACTOR Program Manager.

(3) Regarding paragraphs (1) and (2) above, the approval/disapproval by the PRIME CONTRACTOR Program Manager will not be unreasonably withheld. Verbal approval/disapproval may be provided. All verbal discussions will be confirmed in writing. The PRIME CONTRACTOR Program Manager's decision to approval or disapproval will be based upon consultation with the EPA Contracting Officer. The decisions of the EPA Contracting Officer are final.

The SUBCONTRACTOR shall insert in any second tier remedial planning and implementation subcontract or consultant agreement hereunder the provisions

which shall conform substantially to the language of this article, including this paragraph. However, Paragraphs (1) and (2) shall be included in all second tier subcontract and consultant agreements.

I.5 Health and Safety

The nature of the Work to be performed under this Agreement is inherently hazardous.

In performance of Work under this Agreement the SUBCONTRACTOR shall, as a minimum, satisfy all Federal, state, and local statutes, regulations, ordinances, etc., regarding health and safety. Beyond this minimum requirement, the SUBCONTRACTOR shall comply with his own Health and Safety Program and with the Site Safety Plan prepared by PRIME CONTRACTOR for a particular site proposed for field investigation under this Agreement.

I.6 Training

The SUBCONTRACTOR shall certify to PRIME CONTRACTOR in writing that each of its employees or second tier subcontractors or consultants has completed an EPA approved training program (IAW 29 CFR 1910.120), in relation to this project, prior to assignment of any such employee or second tier subcontractor or consultant to field duty.

I.7 Technical Data

(1) The SUBCONTRACTOR hereby agrees to deliver to PRIME CONTRACTOR within one hundred and twenty (120) days after the completion of the Work under this Agreement or as otherwise requested by PRIME CONTRACTOR the following documents:

a. All originals and copies, and all abstracts and excerpts therefrom, of all information supplied to the SUBCONTRACTOR by PRIME CONTRACTOR and specifically designated "Confidential Business Information", pursuant to the clause entitled "Treatment of Confidential Information."

b. All originals and copies, and all abstracts and excerpts therefrom, of all information collected by the SUBCONTRACTOR directly from a business or from a source that represents a business or businesses, such as a trade association, pursuant to the clause entitled "Screening Business Information for Claims of Confidentiality."

c. All originals (if originals are unavailable, copies will be acceptable) of all data defined below, which are pertinent to the support of the Remedial Response Program and have been furnished to the SUBCONTRACTOR by PRIME CONTRACTOR or have been generated by the SUBCONTRACTOR in performance of this Agreement. In the event that there is any disagreement as to whether certain data is considered pertinent, the PRIME CONTRACTOR Program Manager shall make the final determination.

"Data", as used in this clause, means recorded information, regardless of form or the media on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing, or management information.

d. Copies of all other types of additional data, including but not limited to: reference materials, source lists, field notes, log books, chemical data, maps, and photographs, pursuant to the contract clause entitled "Additional Data Requirements."

(2) With regard to all copies of data specifically requested by PRIME CONTRACTOR after 120 days from the completion of the Work and supplied in response thereto by the SUBCONTRACTOR, the SUBCONTRACTOR shall be entitled to compensation (either through this Agreement or a separate contractual agreement) to cover the cost of collecting, preparing, editing, duplicating, assembling, and shipping the data requested.

(3) The SUBCONTRACTOR shall not be required to turn over or provide to PRIME CONTRACTOR any of the following:

a. Financial, administrative, cost and pricing and management data, or other information incidental to contract administration, pursuant to the clause entitled "Rights in Data - Special Works." Such financial, cost, pricing, and management data does not refer to site specific cost records which are necessary to substantiate cost recovery actions.

b. Data that is not essential and closely related to the Work. In the event there is any disagreement as to whether certain data is essential and related to the Work, the PRIME CONTRACTOR Program Manager shall make the final determination.

c. Contractual agreements for supplies or services not related to the Work under this Agreement. (This exclusion does not apply, however, to technical data resulting from such services).

- d. SUBCONTRACTOR and personnel performance ratings and evaluations.
- e. Technical or other data previously developed by parties other than the SUBCONTRACTOR which was acquired independently of this Agreement or acquired by the SUBCONTRACTOR prior to this Agreement under conditions restricting the SUBCONTRACTOR's right to such data.

(4) Upon receipt of all data provided to the PRIME CONTRACTOR by the SUBCONTRACTOR under paragraph (1), above, the PRIME CONTRACTOR Program Manager shall acknowledge in writing to the SUBCONTRACTOR the receipt of all confidential or other data.

I.8 Future Expert Consulting Services

It is recognized that, subsequent to the performance of the Work, the need may arise to provide expert testimony during hearings and/or court proceedings involving site specific activities or other matters, with regard to which personnel provided by the SUBCONTRACTOR under this Agreement (including second tier subcontractor personnel) would have gained expertise as a result of tasks performed under this Agreement. Therefore, the SUBCONTRACTOR agrees to make available expert consulting services in support of such future proceedings, and to enter into intent agreements as necessary with second tier subcontractors or consultants to ensure the availability of SUBCONTRACTOR personnel, provided under this Agreement, to provide expert consulting services. Any agreement to provide such services in the future serves as a notice of intent only. Such services are not purchased hereby and will be obtained through a separate contractual agreement.

I.9 Notification of Conflict of Interest Regarding Personnel

In addition to the requirements of the Agreement clause entitled "Organizational Conflicts of Interest," the following provisions with regard to individual personnel performing under this Agreement shall apply for the duration of the Agreement.

The SUBCONTRACTOR agrees to notify the PRIME CONTRACTOR Program Manager of any actual, apparent, or potential conflict of interest with regard to any individual working on the Project or having access to information regarding this Agreement. Notification of any conflict of interest shall include both organizational conflicts of interest (as defined in the above-referenced Agreement clause) and personal conflicts of interest (which are defined as the same types of

relationships as an organizational conflict of interest, but applicable to an individual).

In the event that a personal conflict of interest appears to exist, the individual who is affected shall be disqualified from taking part in any way in the performance of the assigned work which created the conflict of interest situation.

I.10 Project Employee Confidentiality Agreement

The SUBCONTRACTOR agrees to obtain confidentiality agreements from all personnel working under this Agreement. Confidentiality Agreement Forms for this purpose will be provided by PRIME CONTRACTOR. Any second tier subcontractor or consultant will also require completion of such forms which will be retained by the SUBCONTRACTOR with copies sent to the PRIME CONTRACTOR Program Manager.

Such agreements shall contain provisions which stipulate that each individual agrees not to disclose to any entity external to EPA, DOJ, or PRIME CONTRACTOR either in whole or in part any data or technical data provided by PRIME CONTRACTOR or the Government or generated by the SUBCONTRACTOR, any site specific cost information, or any enforcement strategy without first obtaining the written permission of the EPA Contracting Officer. Such agreements shall be effective for a period of ten (10) years commencing with the date of this Agreement.

I.11 Expert Testimony

From time to time, the Government may have the need for expert testimony during enforcement proceedings for a given site where the SUBCONTRACTOR provided services. Such effort shall be considered within the scope of this Agreement. The individual(s) selected to testify shall be fully knowledgeable of the details of the site under litigation, shall be credible, and be an expert in their field. The testimony shall normally relate to what actions the SUBCONTRACTOR took at a site. In the event such services are required after performance of this Agreement, a separate negotiated agreement may be instituted with the SUBCONTRACTOR.

I.12 Second Tier Subcontractor or Consultant Selection Procedures

The SUBCONTRACTOR shall select second tier subcontractors or consultant services in accordance with Title IX of the Federal Property and Administrative Services Act of 1949. Such procedures are required by Section 119 of the

Superfund Amendments and Reauthorization Act of 1986 and shall apply only to subcontracts in support of the Superfund Program.

No such second tier subcontractor or consultation agreements will be entered into without the written permission of the PRIME CONTRACTOR Program Manager.

L.13 Competition in Subcontracting

The SUBCONTRACTOR shall select lower tier subcontractors (including suppliers) or consultants on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the task assignment. No such second tier subcontracts or consultant agreements will be entered into without the written approval of the PRIME CONTRACTOR Program Manager.

L.14 Special Patent Reporting Requirements

In order to avoid, mitigate or neutralize an actual or potential conflict of interest, if the SUBCONTRACTOR anticipates the use of corporate patents or other proprietary technologies unique to the SUBCONTRACTOR for use in remedial design and/or remedial action, the SUBCONTRACTOR shall notify the PRIME CONTRACTOR Program Manager in writing of the intent to use such patents or proprietary technologies within five (5) days of the execution of this Agreement.

L.15 Restrictions on Subcontractor Sales to the Government

(a) Except as provided in (b) below, the SUBCONTRACTOR shall not enter into any agreement with an actual or perspective lower tier subcontractor, nor otherwise act in any manner, which has or may have the effect of restricting sales by such lower tier subcontractors directly to the Government of any item or process (including computer software) made or furnished by the lower tier subcontractor under this Agreement or under any follow-on production contract.

(b) The prohibition in (a) above does not preclude the SUBCONTRACTOR from asserting rights that are otherwise authorized by law or regulation.

(c) The SUBCONTRACTOR agrees to incorporate the substance of this clause, including this paragraph (c), in all lower tier subcontracts under this Agreement.

I.16 Anti-Kickback Procedures

(a) Definitions.

"Kickback", as used in this clause, means any money, fee, commission, credit gift, gratuity, thing of value, or compensation of any kind which is provided, directly or indirectly, to any PRIME CONTRACTOR, PRIME CONTRACTOR employee, SUBCONTRACTOR, SUBCONTRACTOR employee, lower tier subcontractor, or lower tier subcontractor employee for the purpose of improperly obtaining or rewarding favorable treatment in connection with a subcontract relating to the Prime Contract.

"Person", as used in this clause, means a corporation, partnership, business association of any kind, trust, joint-stock company, or individual.

"SUBCONTRACTOR Agreement", as used in this clause, means a contract or contractual action entered into by the PRIME CONTRACTOR and SUBCONTRACTOR for the purpose of obtaining supplies, materials, equipment, or services of any kind.

"PRIME CONTRACTOR Employee", as used in this clause, means any officer, partner, employee, or agent of a PRIME CONTRACTOR .

"Lower Tier Subcontract", as used in this clause, means a contract or contractual action entered into by a SUBCONTRACTOR and a lower tier subcontractor for the purpose of obtaining supplies, materials, equipment, or services of any kind under a subcontract.

"Lower Tier Subcontractor", as used in this clause, (1) means any person, other than the SUBCONTRACTOR, who offers to furnish or furnishes any supplies, materials, equipment, or services of any kind under a lower tier subcontract entered into in connection with such subcontract and (2) includes any person who offers to furnish or furnishes general supplies to the SUBCONTRACTOR or a higher tier subcontractor.

"Lower Tier Subcontractor employee", as used in this clause, means any officer, partner, employee, or agent of a lower tier subcontractor.

(b) The Anti-Kickback Act of 1986 (41 U.S.C. 51-58) (the Act), prohibits any person from -

- (1) Providing or attempting to provide or offering to provide any kickback;
- (2) Soliciting, accepting, or attempting to accept any kickback; or
- (3) Including, directly or indirectly, the amount of any kickback in the contract price charged by a SUBCONTRACTOR to the PRIME CONTRACTOR in the

contract price charged by a lower tier subcontractor to a SUBCONTRACTOR or higher tier subcontractor.

(c)(1) The SUBCONTRACTOR shall have in place and follow reasonable procedures designed to prevent and detect possible violations described in paragraph (b) of this clause in its own operations and direct business relationships.

(2) When the SUBCONTRACTOR has reasonable grounds to believe that a violation described in paragraph (b) of this clause may have occurred, the SUBCONTRACTOR shall promptly report in writing the possible violation. Such reports shall be made to the inspector general of the contracting agency, the head of the contracting agency if the agency does not have an inspector general, or the Department of Justice.

(3) The SUBCONTRACTOR shall cooperate fully with any Federal agency investigating a possible violation described in paragraph (b) of this clause.

(4) Regardless of the contract tier at which a kick-back was provided, accepted, or charged under the contract in violation of paragraph (b) of this clause, the Program Manager may -

(i) Offset the amount of the kickback against any monies owed by the PRIME CONTRACTOR under this contract and/or (ii) direct that the SUBCONTRACTOR withhold from sums owed the lower tier subcontractor, the amount of the kickback. The Program Manager may order that monies withheld under subdivision (c)(4)(ii) of this clause be paid over to the PRIME CONTRACTOR unless the PRIME CONTRACTOR has already offset those monies under subdivision (c)(4)(i) of this clause. In the latter case, the SUBCONTRACTOR shall notify the Program Manager when the monies are withheld.

(5) The SUBCONTRACTOR agrees to incorporate the substance of this clause, including this subparagraph (c)(5), in all lower tier subcontracts under this contract.

I.17 Examination of Records by Comptroller General

(a) This clause applies if this Agreement exceeds \$10,000 and was entered into by negotiation.

(b) The Comptroller General of the United States or a duly authorized representative from the General Accounting Office shall, until 3 years after final payment under this contract or for any shorter period specified in Federal Acquisition Regulation (FAR) Subpart 4.7, Contractor Records Retention, have access to and the right to examine any of the SUBCONTRACTOR's directly pertinent books, documents, papers, or other records involving transactions related to this Agreement.

(c) The SUBCONTRACTOR agrees to include in lower tier subcontracts under this contract a clause to the effect that the Comptroller General or a duly authorized representative from the General Accounting Office shall, until 3 years after final payment under the subcontract or for any shorter period specified in FAR Subpart 4.7, have access to and the right to examine any of the lower tier subcontractor's directly pertinent books, documents, papers, or other records involving transactions related to the lower tier subcontract. "Lower Tier Subcontract," as used in this clause, excludes (1) purchase orders not exceeding \$10,000 and (2) subcontracts or purchase orders for public utility services at rates established to apply uniformly to the public, plus any applicable reasonable connection charge.

(d) The periods of access and examination in paragraphs (b) and (c) above for records relating to (1) appeals under the disputes clause, (2) litigation or settlement of claims arising from the performance of this contract, or (3) costs and expenses of this contract to which the Comptroller General or a duly authorized representative from the General Accounting Office has taken exception shall continue until such appeals, litigation, claims, or exceptions are disposed of.

L18 Audit-Negotiation

(a) *Examination of Costs.* If this is a cost-reimbursement, incentive, time-and-materials, labor-hour, or price-redeterminable contract, or any combination of these, the SUBCONTRACTOR shall maintain-and the EPA Contracting Officer and PRIME CONTRACTOR Program Manager or representatives of the EPA Contracting Officer and PRIME CONTRACTOR Program Manager shall have the right to examine and audit --- books, records, documents, and other evidence and accounting procedures and practices, sufficient to reflect properly all costs claimed to have been incurred or anticipated to be incurred in performing under this Agreement. This right of examination shall include inspection at all reasonable times of the SUBCONTRACTOR's plants, or parts of them, engaged in performing the Work.

(b) *Cost or pricing data.* If, pursuant to law, the SUBCONTRACTOR has been required to submit cost or pricing data in connection with pricing this Agreement or any modification to this Agreement, the EPA Contracting Officer and PRIME CONTRACTOR Program Manager or representatives of the EPA Contracting Officer and PRIME CONTRACTOR Program Manager who are employees of the PRIME CONTRACTOR or the Government shall have the right to examine and audit all books, records, documents, and other data of the SUBCONTRACTOR (including computations and projections) related to negotiating, pricing, or performing under this Agreement or modification, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data. The right of

examination shall extend to all documents necessary to permit adequate evaluation of the cost or pricing data submitted, along with the computations and projections used.

(c) *Reports.* If the SUBCONTRACTOR is required to furnish cost, funding, or performance reports, the EPA Contracting Officer and PRIME CONTRACTOR Program Manager or representatives of the EPA Contracting Officer and PRIME CONTRACTOR Program Manager who are employees of the PRIME CONTRACTOR or the Government shall have the right to examine and audit books, records, other documents, and supporting materials, for the purpose of evaluating (1) the effectiveness of the SUBCONTRACTOR's policies and procedures to produce data compatible with the objectives of these reports and (2) the data reported.

(d) *Availability.* The SUBCONTRACTOR shall make available at its office at all reasonable times the materials described in paragraphs (a) and (b) above, for examination, audit, or reproduction, until 10 years after final payment under this contract, or for any longer period required by statute or by other clauses of this contract. In addition -

(1) If this contract is completely or partially terminated, the records relating to the work terminated shall be made available for 10 years after any resulting final termination settlement; and

(2) Records relating to appeals under the Disputes clause or to litigation or the settlement of claims arising under or relating to this contract shall be made available until such appeals, litigation, or claims are disposed of.

(e) The SUBCONTRACTOR shall insert a clause containing all the terms of this clause, including this paragraph (e), in all lower tier subcontracts over \$10,000 under this contract, altering the clause only as necessary to identify properly the contracting parties and the Program Manager under the PRIME CONTRACTOR's prime contract.

I.19 Price Reduction for Defective Cost or Pricing Data

(a) If the Government should audit the SUBCONTRACTOR records or any lower tier subcontractor records and determine that any price was defective which results in a reduction of the amount of the Prime Contract, the amount of the price reduction will be passed on to the SUBCONTRACTOR on the following basis:

(b) If any price, including profit or fee, negotiated in connection with this contract, or any lower tier subcontract under this contract, was increased by any significant amount because (1) the SUBCONTRACTOR or a lower tier subcontractor furnished cost or pricing data that were not complete, accurate, and current as certified in its Certificate of Current Cost or Pricing Data, (2) a lower

tier subcontractor or prospective lower tier subcontractor furnished the SUBCONTRACTOR cost or pricing data that were not complete, accurate, and current as certified in the SUBCONTRACTOR's Certificate of Current Cost or Pricing Data, or (3) any of these parties furnished data of any description that were not accurate, the price or cost shall be reduced accordingly and this contract shall be modified to reflect the reduction.

(c) Any reduction in this contract price under paragraph (b) above due to defective data from a prospective lower tier subcontractor that was not subsequently awarded the lower tier subcontract shall be limited to the amount, plus applicable overhead and profit markup, by which (1) the actual lower tier subcontract or (2) the actual cost to the SUBCONTRACTOR, if there was no lower tier subcontract, was less than the prospective lower tier subcontract cost estimate submitted by the SUBCONTRACTOR, provided, that the actual lower tier subcontract price was not itself affected by defective cost or pricing data.

(d) (1) If the Program Manager determines under paragraph (b) of this clause that a price or cost reduction should be made, the SUBCONTRACTOR agrees not to raise the following matters as a defense:

(i) The SUBCONTRACTOR or lower tier subcontractor was a sole source supplier or otherwise was in a superior bargaining position and thus the price of the contract would not have been modified even if accurate, complete, and current cost or pricing data had been submitted.

(ii) The Program Manager should have known that the cost or pricing data in issue were defective even though the SUBCONTRACTOR or lower tier subcontractor took no affirmative action to bring the character of the data to the attention of the Program Manager.

(iii) The contract was based on an agreement about the total cost of the contract and there was no agreement about the cost of each item procured under the contract.

(iv) The SUBCONTRACTOR or lower tier subcontractor did not submit a Certificate of Current Cost or Pricing Data.

(2)(i) Except as prohibited by subdivision (d)(2)(ii) of this clause, an offset in an amount determined appropriate by the Program Manager based upon the facts shall be allowed against the amount of a contract price reduction if-

(A) The SUBCONTRACTOR certifies to the Program Manager that, to the best of the SUBCONTRACTOR's knowledge and belief, the SUBCONTRACTOR is entitled to the offset in the amount requested; and

(B) The SUBCONTRACTOR proves that the cost or pricing data were available before the date of agreement on the price of the contract (or price of the modification) and that the data were not submitted before such date.

(ii) An offset shall not be allowed if-

(A) The understated data was known by the SUBCONTRACTOR to be understated when the Certificate of Current Cost or Pricing Data was signed; or

(B) the PRIME CONTRACTOR proves that the facts demonstrate that the contract price would not have increased in the amount to be offset even if the available data had been submitted before the date of agreement on price.

I.20 Subcontractor Cost or Pricing Data.

(a) Before awarding any lower tier subcontract expected to exceed \$100,000 when entered into, or before pricing any lower tier subcontract modification involving a pricing adjustment expected to exceed \$100,000, the SUBCONTRACTOR shall require the lower tier subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless the price is-

(1) Based on adequate price competition;

(2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(3) Set by law or regulation.

(b) The SUBCONTRACTOR shall require the lower tier subcontractor to certify in substantially the form prescribed in Subsection 15.804-4 of the Federal Acquisition Regulation (FAR) that, to the best of its knowledge and belief, the data submitted under paragraph (a) above were accurate, complete, and current as of the date of agreement on the negotiated price of the subcontract or lower tier subcontract modification.

(c) In each lower tier subcontract that exceeds \$100,000 when entered into, the SUBCONTRACTOR shall insert either -

(1) The substance of this clause, including this paragraph (c), if paragraph (a) above requires admission of cost or pricing data for the lower tier subcontract; or

(2) The substance of the clause at FAR 52.215-25, Subcontractor Cost or Pricing Data-Modifications.

L.21 Subcontractor Cost or Pricing Data-Modifications

(a) The requirements of paragraphs (b) and (c) of this clause shall (1) become operative only for any modification to this contract involving a pricing adjustment expected to exceed \$100,000 and (2) be limited to such modifications.

(b) Before awarding any lower tier subcontract expected to exceed \$100,000 when entered into, or pricing any lower tier subcontract modification involving a pricing adjustment expected to exceed \$100,000, the SUBCONTRACTOR shall require the lower tier subcontractor to submit cost or pricing data (actually or by specific identification in writing), unless the price is-

(1) Based on adequate price competition;

(2) Based on established catalog or market prices of commercial items sold in substantial quantities to the general public; or

(3) Set by law or regulation.

(c) The SUBCONTRACTOR shall require the lower tier subcontractor to certify in substantially the form prescribed in Subsection 15.804-4 of the Federal Acquisition Regulation (FAR) that, to the best of its knowledge and belief, the data submitted under paragraph (b) above were accurate, complete, and current as of the date of agreement on the negotiated price of the lower tier subcontract or lower tier subcontract modification.

(d) The SUBCONTRACTOR shall insert the substance of this clause, including this paragraph (d), in each lower tier subcontract that exceeds \$100,000 when entered into.

L.22 Utilization of Small Business Concerns and Small Disadvantaged Business Concerns

(a) It is the policy of the United States that small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals shall have the maximum practicable opportunity to participate in performing contracts let by any Federal agency, including contracts and subcontracts for subsystems, assemblies, components and related services for

major systems. It is further the policy of the United States that its prime contractors establish procedures to ensure the timely payment of amounts due pursuant to the terms of their subcontracts with small business concerns and small business concerns owned and controlled by socially and economically disadvantaged individuals.

(b) The SUBCONTRACTOR hereby agrees to carry out this policy in the awarding of lower tier subcontracts to the fullest extent consistent with efficient contract performance. The SUBCONTRACTOR further agrees to cooperate in any studies or surveys as may be conducted by the United States Small Business Administration or the awarding agency of the United States as may be necessary to determine the extent of the SUBCONTRACTOR's compliance with this clause.

(c) As used in this contract, the term "small business concern" shall mean a small business as defined pursuant to section 3 of the Small Business Act and relevant regulations promulgated pursuant thereto. The term "small business concern owned and controlled by socially and economically disadvantaged individuals" shall mean a small business concern-

(1) Which is at least 51 percent owned by one or more socially and economically disadvantaged individuals; or, in the case of any publicly owned business, at least 51 per cent of the stock of which is owned by one or more socially and economically disadvantaged individuals and

(2) Whose management and daily business operations are controlled by one or more of such individuals.

The SUBCONTRACTOR shall presume that socially and economically disadvantaged individuals include Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, Asian-Indian Americans and other minorities, or any other individual found to be disadvantaged by the Administration pursuant to section 8(a) of the Small Business Act.

(d) SUBCONTRACTOR's acting in good faith may rely on written representations by their lower tier subcontractors regarding their status as either a small business concern or a small business concern owned and controlled by socially and economically disadvantaged individuals.

I.23 Utilization of Women-Owned Small Businesses.

(a) "Women-Owned small businesses", as used in this clause, means small business concerns that are at least 51 percent owned by women who are United States citizens and who also control and operate the business.

"Control", as used in this clause, means exercising the power to make policy decisions.

"Operate", as used in this clause, means being actively involved in the day-to-day management of the business.

"Small business concern", as used in this clause, means a concern including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) It is the policy of the United States that women-owned small businesses shall have the maximum practicable opportunity to participate in performing contracts awarded by any Federal agency.

(c) The SUBCONTRACTOR agrees to use its best efforts to give women-owned small businesses the maximum practicable opportunity to participate in the lower tier subcontracts it awards to the fullest extent consistent with the efficient performance of its contract.

(d) The SUBCONTRACTOR may rely on written representations by its subcontractors regarding their status as women-owned small businesses.

I.24 Utilization of Labor Surplus Area Concerns

(a) Applicability. This clause is applicable if this contract exceeds the appropriate small purchase limitation in Part 13 of the Federal Acquisition Regulation.

(b) Policy. It is the policy of the Government to award contracts to concerns that agree to perform substantially in labor surplus areas (LSA's) when this can be done consistent with the efficient performance of the contract and at prices no higher than are obtainable elsewhere. The SUBCONTRACTOR agrees to use its best efforts to place lower tier subcontracts in accordance with this policy.

(c) Order of preference. In complying with paragraph (b) above and with paragraph (c) of the clause of this contract entitled Utilization of Small Business concerns and Small Disadvantaged Business Concerns, the SUBCONTRACTOR shall observe the following order of preference in awarding lower tier subcontracts: (1) small business concerns that are LSA concerns, (2) other small business concerns, and (3) other LSA concerns.

(d) Definitions. "Labor surplus area," as used in this clause, means a geographical area identified by the Department of Labor in accordance with 20 CFR 654, Subpart A, as an area of concentrated unemployment or underemployment or an area of labor surplus.

"Labor surplus area concern," as used in this clause, means a concern that together with its first-tier subcontractors will perform substantially in labor surplus areas. Performance is substantially in labor surplus areas if the costs incurred under the contract on account of manufacturing, production, or

performance of appropriate services in labor surplus areas exceed 50 percent of the contract price.

I.25 Equal Opportunity

During performing this contract, the SUBCONTRACTOR agrees as follows:

(1) The SUBCONTRACTOR shall not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin.

(2) The SUBCONTRACTOR shall take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, or national origin. This shall include, but not be limited to, (i) employment, (ii) upgrading, (iii) demotion, (iv) transfer, (v) recruitment or recruitment advertising, (vi) layoff or termination, (vii) rates of pay or other forms of compensation, and (viii) selection for training, including apprenticeship.

(3) The SUBCONTRACTOR shall post in conspicuous places available to employees and applicants for employment the notices to be provided by the Program Manager that explain this clause.

(4) The SUBCONTRACTOR shall, in all solicitations or advertisements for employees placed by or on behalf of the SUBCONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

(5) The SUBCONTRACTOR shall send, to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding, the notice to be provided by the Program Manager advising the labor union or works' representative of the SUBCONTRACTOR's commitments under this clause, and post copies of the notice in conspicuous places available to employees and applicants for employment.

(6) The SUBCONTRACTOR shall comply with Executive Order 11246, as amended, and the rules, regulations, and orders of the Secretary of Labor.

(7) The SUBCONTRACTOR shall furnish to the contracting agency all information required by Executive Order 11246, as amended, and by the rules, regulations, and orders of the Secretary of Labor. Standard Form 100 (EEO-1), or any successor form, is the prescribed form to be filed within 30 days following the award, unless filed within 12 months preceding the date of award.

(8) The SUBCONTRACTOR shall permit access to its books, records, and accounts by the contracting agency or the Office of Federal Contract Compliance Programs (OFCCP) for the purposes of investigation to ascertain the SUBCONTRACTOR's compliance with the applicable rules, regulations, and orders.

(9) If the OFCCP determines that the SUBCONTRACTOR is not in compliance with this clause or any rule, regulation, or order of the secretary of Labor, this contract may be canceled, terminated, or suspended in whole or in part and the SUBCONTRACTOR may be declared ineligible for further Government contracts, under the procedures authorized in Executive Order 11246, as amended. In addition, sanctions may be imposed and remedies invoked against the SUBCONTRACTOR as provided in Executive Order 11246, as amended, the rules, regulations, and orders of the Secretary of Labor, or as otherwise provided by law.

(10) The SUBCONTRACTOR shall include the terms and conditions of subparagraph (1) through (11) of this clause in every lower tier subcontract or purchase order that is not exempted by the rules, regulations, or orders of the Secretary of Labor issued under Executive Order 11246, as amended, so that these terms and conditions will be binding upon each lower tier subcontractor or vendor.

(11) The SUBCONTRACTOR shall take such action with respect to any lower tier subcontract or purchase order as the contracting agency may direct as a means of enforcing these terms and conditions, including sanctions for noncompliance; provided, that if the SUBCONTRACTOR becomes involved in, or is threatened with, litigation with a lower tier subcontractor or vendor as a result of any direction, the SUBCONTRACTOR may request the United States to enter into the litigation to protect the interests of the United States.

I.26 Affirmative Action for Special Disabled and Vietnam Era Veterans

(a) Definitions.

"Appropriate office of the State employment service system," as used in this clause, means the local office of the Federal-State national system of public employment offices assigned to serve the area where the employment opening is to be filled, including the District of Columbia, Guam, Puerto Rico, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

"Openings that the SUBCONTRACTOR proposes to fill from within its own organization," as used in this clause, means employment openings for which no

one outside the SUBCONTRACTOR's organization (including any affiliates, subsidiaries, and the parent companies) will be considered and includes any openings that the SUBCONTRACTOR proposes to fill from regularly established "recall" lists.

"Openings that the SUBCONTRACTOR proposes to fill under a customary and traditional employer-union hiring arrangement," as used in this clause, means employment openings that the SUBCONTRACTOR proposes to fill from union halls, under their customary and traditional employer-union hiring relationship.

"Suitable employment openings," as used in this clause ---

(1) Includes, but is not limited to, openings that occur in jobs categorized as ---

- (i) Production and nonproduction;
- (ii) Plant and office;
- (iii) Laborers and mechanics;
- (iv) Supervisory and nonsupervisory;
- (v) Technical; and
- (vi) Executive, administrative, and professional positions compensated on a salary basis of less than \$25,000 a year; and

(2) Includes full-time employment, temporary employment of over 3 days, and part-time employment, but not openings that the SUBCONTRACTOR proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement, nor openings in an educational institution that are restricted to students of that institution.

(b) *General.* (1) Regarding any position for which the employee or applicant for employment is qualified, the SUBCONTRACTOR shall not discriminate against the individual because the individual is a special disabled or Vietnam Era veteran. The SUBCONTRACTOR agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified special disabled and Vietnam Era veteran without discrimination based upon their disability or veterans' status in all employment practices such as ---

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, included apprenticeship.

(2) The SUBCONTRACTOR agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Vietnam Era Veteran's Readjustment Assistance Act of 1972 (the Act), as amended.

(c) *Listing openings.* (1) The SUBCONTRACTOR agrees to list all suitable employment openings existing at contract award or occurring during contract performance, at an appropriate office of the State employment service system in the locality where the opening occurs. These openings include those occurring at any SUBCONTRACTOR facility, including one not connected with performing this contract. An independent corporate affiliate is exempt from this requirement.

(2) State and local government agencies holding Federal contracts of \$10,000 or more shall also list all their suitable openings with the appropriate office of the State employment service.

(3) The listing of suitable employment openings with the State employment service system is required at least concurrently with using any other recruitment source or effort and involves the obligations of placing a bona fide job order, including accepting referrals of veterans and nonveterans. This listing does not require hiring any particular job applicant or hiring from any particular group of job applicants and is not intended to relieve the SUBCONTRACTOR from any requirements of Executive orders or regulations concerning nondiscrimination in employment.

(4) Whenever the SUBCONTRACTOR becomes contractually bound to the listing terms of this clause, it shall advise the State employment service system, in each State where it has establishments, of the name and location of each hiring location in the State. As long as the SUBCONTRACTOR is contractually bound to these terms and has so advised the State system, it need not advise the State system of subsequent contracts. The SUBCONTRACTOR may advise the State system when it is no longer bound by this contract clause.

(5) Under the most compelling circumstances, an employment opening may not be suitable for listing, including situations when (i) the Government's needs cannot reasonably be supplied, (ii) listing would be contrary to national security, or (iii) the requirement of listing would not be in the Government's interest.

(d) *Applicability.* (1) This clause does not apply to the listing of employment openings which occur and are filled outside the 50 states, the District of Columbia, Puerto Rico, Guam, Virgin Islands, American Samoa, and the Trust Territory of the Pacific Islands.

(2) The terms of paragraph (c) above of this clause do not apply to openings that the SUBCONTRACTOR proposes to fill from within its own organization or under a customary and traditional employer-union hiring arrangement. This exclusion does not apply to a particular opening once an employer decides to consider applicants outside of its own organization or employer-union arrangement for that opening.

(e) *Postings.* (1) The SUBCONTRACTOR agrees to post employment notices stating (i) The SUBCONTRACTOR's obligation under the law to take affirmative action to employ and advance in employment qualified special disabled veterans and veterans of the Vietnam era, and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor (Director), and provided by or through the Program Manager.

(3) The SUBCONTRACTOR shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the SUBCONTRACTOR is bound by the terms of the Act, and is committed to take affirmative action to employ, and advance in employment, qualified special disabled and Vietnam Era veterans.

(f) *Noncompliance.* If the SUBCONTRACTOR does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations and relevant orders of the Secretary issued pursuant to the Act.

(g) *Subcontracts.* The SUBCONTRACTOR shall include the terms of this clause in every lower tier subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary. The SUBCONTRACTOR shall act as specified by the Director to enforce the terms, including action for noncompliance.

I.27 Employment Reports on Special Disabled Veterans and Veterans of the Vietnam Era

(a) The SUBCONTRACTOR shall report at least annually, as required by the Secretary of Labor, on:

(1) The number of special disabled veterans and the number of veterans of the Vietnam era in the work-force of the SUBCONTRACTOR by job category and hiring location; and

(2) The total number of new employees hired during the period covered by the report, and of that total, the number of special disabled veterans, and the number of veterans of the Vietnam era.

(b) The above items shall be reported by completing the form entitled "Federal Contractor Veterans' Employment Report VETS-100".

(c) Reports shall be submitted no later than March 31 of each year beginning March 31, 1988.

(d) The employment activity report required by paragraph (a)(2) of this clause shall reflect total hires during the most recent 12-month period as of the ending date selected for the employment profile report required by paragraph (a)(1) of this clause. SUBCONTRACTOR's may select an ending date: (1) as of the end of any pay period during the period January through March 1st of the year the report is due, or (2) as of December 31, if the SUBCONTRACTOR has previous written approval from the Equal Employment Opportunity Commission to do so for purposes of submitting the Employer Information Report EEO-1 (Standard Form 100).

(e) The count of veterans reported according to paragraph (a) of this clause shall be based on voluntary disclosure. Each SUBCONTRACTOR subject to the reporting requirements at 38 U.S.C. 2012(d) shall invite all special disabled veterans and veterans of the Vietnam era who wish to benefit under the affirmative action program at 38 U.S.C. 2012 to identify themselves to the SUBCONTRACTOR. The invitation shall state that the information is voluntary provided, that the information will be kept confidential, that disclosure or refusal to provide the information will not subject the applicant or employee to any adverse treatment and that the information will be used only in accordance with the regulations promulgated under 38 U.S.C. 2012.

(f) *Subcontracts.* The SUBCONTRACTOR shall include the terms of this clause in every lower tier subcontract or purchase order of \$10,000 or more unless exempted by rules, regulations, or orders of the Secretary.

L28 Affirmative Action for Handicapped Workers

(a) *General.* (1) Regarding any position for which the employee or applicant for employment is qualified, the SUBCONTRACTOR shall not discriminate against any employee or applicant because of physical or mental handicap. The SUBCONTRACTOR agrees to take affirmative action to employ, advance in employment, and otherwise treat qualified handicapped individuals without

discrimination based upon their physical or mental handicap in all employment practices such as ---

- (i) Employment;
- (ii) Upgrading;
- (iii) Demotion or transfer;
- (iv) Recruitment;
- (v) Advertising;
- (vi) Layoff or termination;
- (vii) Rates of pay or other forms of compensation; and
- (viii) Selection for training, including apprenticeship.

(2) The SUBCONTRACTOR agrees to comply with the rules, regulations, and relevant orders of the Secretary of Labor (Secretary) issued under the Rehabilitation Act of 1973 (29 U.S.C. 793) (the Act), as amended.

(b) *Postings.* (1) The SUBCONTRACTOR agrees to post employment notices stating (i) the SUBCONTRACTOR's obligation under the law to take affirmative action to employ and advance in employment qualified handicapped individuals and (ii) the rights of applicants and employees.

(2) These notices shall be posted in conspicuous places that are available to employees and applicants for employment. They shall be in a form prescribed by the Director, Office of Federal Contract Compliance Programs, Department of Labor (Director), and provided by or through the Program Manager.

(3) The SUBCONTRACTOR shall notify each labor union or representative of workers with which it has a collective bargaining agreement or other contract understanding, that the SUBCONTRACTOR is bound by the terms of Section 502 of the Act and is committed to take affirmative action to employ, and advance in employment, qualified physically and mentally handicapped individuals.

(c) *Noncompliance.* If the SUBCONTRACTOR does not comply with the requirements of this clause, appropriate actions may be taken under the rules, regulations, and relevant orders of the Secretary issued pursuant to the Act.

(d) *Surplus.*

"Labor surplus area concern," as used in this clause, means a concern that together with its first-tier subcontractors will perform substantially in labor surplus areas. Performance is substantially in labor surplus areas if the costs incurred under the contract on account of manufacturing, production, or

performance of appropriate services in labor surplus areas exceed 50 percent of the contract price.

I.29 Clean Air and Water

(a) "Air Act," as used in this clause, means the Clean Air Act (42 U.S.C. 7401 et seq.)

"Clean air standards," as used in this clause, means ---

(1) Any enforceable rules, regulations, guidelines, standards, limitations, orders, controls prohibitions, work practices, or other requirements contained in , issued under, or otherwise adopted under the Air Act or Executive Order 11738;

(2) An applicable implementation plan as described in section 110(d) of the air Act (42 U.S.C. 7410(d));

(3) An approved implementation procedure or plan under section 111(c) or section 111(d) of the Air Act (42 U.S.C. 7411(c) or (d)); or

(4) An approved implementation procedure under section 112(d) of the Air Act (42 U.S.C. 7412(d)).

"Clean water standards, " as used in *this clause*, means *any enforceable limitation, control, conditions, prohibition*, standard, or other requirement promulgated under the Water Act or contained in a permit issued to a discharger by the Environmental Protection Agency or by a State under an approved program, as authorized by section 402 of the Water Act (33 U.S.C. 1342), or by local government to ensure compliance with pretreatment regulations as required by section 307 of the Water Act (33 U.S.C. 1317).

"Compliance," as used in this clause, means compliance with ---

(1) Clean air or water standards; or

(2) A schedule or plan ordered or approved by a court of competent jurisdiction, the Environmental Protection Agency, or an air or water pollution control agency under the requirements of the Air Act or Water Act and related regulations.

"Facility," as used in this clause, means any performance of a contract or subcontract. When a location or site of operations includes more than one building, plant, installation, or structure, the entire location or site shall be deemed a facility except when the administrator, or a designee, of the

Environmental Protection Agency, determines that independent facilities are located in one geographical area.

"Water Act," as used in this clause, means Clean Water Act (33 U.S.C. 1251 *et seq.*).

(b) The SUBCONTRACTOR agrees ---

(1) To comply with all the requirements of section 114 of the Clean Air Act (42 U.S.C. 7414) and section 308 of the Clean Water Act (33 U.S.C. 1318) relating to inspection, monitoring entry, reports, and information, as well as other requirements specified in Section 114 and Section 308 of the Air Act and the Water Act, and all regulations and guidelines issued to implement those acts before the award of this contract;

(2) That no portion of the work *required by this contract* will be performed in a facility listed on the Environmental Protection Agency List of Violating Facilities on the date when this contract was awarded unless and until the EPA eliminates the name of the facility from the listing;

(3) To use best efforts to comply with clean air standards and clean water standards at the facility in which the contract is being performed; and

(4) To insert the substance of this clause into any nonexempt lower tier subcontract, including this subparagraph (b)(4).

I.30 Hazardous Material Identification and Material Safety Data

(a) The SUBCONTRACTOR agrees to submit a Material Safety Data Sheet (Department of Labor Form OSHA-20) as prescribed in Federal Standard No. 313A, for all hazardous material 5 days before delivery of the materials, whether or not listed in Appendix A of the Standard. This obligation applies to all materials delivered under this contract which will involve exposure to hazardous materials or items containing these materials.

(b) "Hazardous material," as used in this clause, is as defined in Federal Standard No. 313A, in effect on the date of this contract.

(c) Neither the requirements of this clause nor any act or failure to act by the PRIME CONTRACTOR or the Government shall relieve the SUBCONTRACTOR of any responsibility or liability for the safety of Government, PRIME CONTRACTOR, SUBCONTRACTOR, or lower tier subcontractor personnel or property.

(d) The SUBCONTRACTOR shall comply with applicable Federal, state, and local laws, codes, ordinances, and regulations (including the obtaining of licenses and permits) in connection with hazardous material.

(1) To use, duplicate, and disclose any data to which this clause is applicable. The purposes of this right are to (i) apprise personnel of the hazards to which they may be exposed in using, handling, packaging, transporting, or disposing of hazardous materials; (ii) obtain medical treatment for those affected by the material; and (iii) have others use, duplicate, and disclose the data for the PRIME CONTRACTOR and the Government for these purposes.

(2) To use, duplicate, and disclose data furnished under this clause, in accordance with subparagraph (e)(1) above, in precedence over any other clause of this contract providing for rights in data.

(3) That the PRIME CONTRACTOR or the Government is not precluded from using similar or identical data acquired from other sources.

(4) That the data shall not be duplicated, disclosed, or released outside the PRIME CONTRACTOR or the Government, in whole or in part for any acquisition or manufacturing purpose, if the following legend is marked on each piece of data to which this clause applies ---

"This is furnished under United States Government Contract No. 68-W8-0079 and shall not be used, duplicated, or disclosed for any acquisition or manufacturing purpose without the permission of WW Engineering and Science and the U.S. Environmental Protection Agency. This legend shall be marked on any reproduction of this data."

(5) That the SUBCONTRACTOR shall not place the legend or any other restrictive legend on any data which (i) the SUBCONTRACTOR or any lower tier subcontractor previously delivered to the PRIME CONTRACTOR without limitations or (ii) should be delivered without limitations under the conditions specified in the Federal Acquisition Regulation in the clause at 52.227-18, Rights in Data.

(f) The SUBCONTRACTOR shall insert this clause, including this paragraph (f), with appropriate changes in the designation of the parties, in lower tier subcontracts (including purchase designations or purchase orders) under this contract involving hazardous material.

I.31 Authorization and Consent

(a) The Government authorizes and consents to all use and manufacture, in performing this contract or any lower tier subcontract, of any invention described in and covered by a United States patent (1) embodied in the structure or composition of any article the delivery of which is accepted by the Government under this contract or (2) used in machinery, tools, or methods whose use necessarily results from compliance by the SUBCONTRACTOR or a lower tier subcontractor with (i) specifications or written provisions forming a part of this contract or (ii) specific written instructions given by the EPA Contracting Officer directing the manner of performance. The entire liability to the Government for infringement of a patent of the United States shall be determined solely by the provisions of the indemnity clause, if any, included in this contract or any lower tier subcontract hereunder and the Government assumes liability for all other infringement to the extent of the authorization and consent hereinabove granted.

(b) The SUBCONTRACTOR agrees to include, and require inclusion of, this clause, suitably modified to identify the parties, in all lower tier subcontracts for supplies or services (including construction, architect-engineer services, and materials, supplies, models, samples, and design or testing services expected to exceed \$25,000; however, omission of this clause from any lower tier subcontract, under or over \$25,000, does not affect this authorization and consent.

I.32 Notice and Assistance Regarding Patent and Copyright Infringement

(a) The SUBCONTRACTOR shall report to the PRIME CONTRACTOR Program Manager and the EPA Contracting Officer, promptly and in reasonable written detail, each notice or claim of patent or copyright infringement based on the performance of this contract of which the SUBCONTRACTOR has knowledge.

(b) In the event of any claim or suit against the PRIME CONTRACTOR or the Government on account of any alleged patent or copyright infringement arising out of the performance of this contract or out of the use of any supplies furnished or work or services performed under this contract, the SUBCONTRACTOR shall furnish to the PRIME CONTRACTOR and the Government when requested by the PRIME CONTRACTOR Program Manager or the EPA Contracting Officer, all evidence and information in possession of the SUBCONTRACTOR pertaining to such suit or claim. Such evidence and information shall be furnished at the expense of the PRIME CONTRACTOR and the Government except where the SUBCONTRACTOR has agreed to indemnify the PRIME CONTRACTOR and the Government.

(c) The SUBCONTRACTOR agrees to include, and require inclusion of, this clause in all lower tier subcontracts for supplies or services (including construction and architect-engineer subcontracts and those for material, supplies, models, samples, or design or testing services) expected to exceed the dollar amount set forth in 13000 of the Federal Acquisition Regulation (FAR).

I.33 Limitation of Liability -- Services

(a) Except as provided in paragraphs (b) and (c) below, and except to the extent that the SUBCONTRACTOR is expressly responsible under this contract for deficiencies in the services required to be performed under it (including any materials furnished in conjunction with those services), the SUBCONTRACTOR shall not be liable for loss of or damage to property of the PRIME CONTRACTOR that (1) occurs after PRIME CONTRACTOR acceptance of services performed under this contract and (2) results from any defects or deficiencies in the services performed or materials furnished.

(b) The limitation of liability under paragraph (a) above shall not apply when a defect or deficiency in, or the PRIME CONTRACTOR's acceptance of, services performed or materials furnished results from willful misconduct or lack of good faith on the part of any of the SUBCONTRACTOR's managerial personnel. The term "SUBCONTRACTOR's managerial personnel," as used in this clause, means the SUBCONTRACTOR's directors, officers, and any of the SUBCONTRACTOR's managers, superintendents, or equivalent representatives who have supervision or direction of ---

(1) All or substantially all of the SUBCONTRACTOR's business;

(2) All or substantially all of the SUBCONTRACTOR's operations at any one plant, laboratory, or separate location at which the contract is being performed; or

(3) A separate and complete major industrial operation connected with the performance of this contract.

(c) If the SUBCONTRACTOR carries insurance, or has established a reserve for self-insurance, covering liability for loss or damage suffered by the PRIME CONTRACTOR through the SUBCONTRACTOR's performance of services or furnishing of materials under this contract, the SUBCONTRACTOR shall be liable to the PRIME CONTRACTOR, to the extent of such insurance or reserve, for loss of or damage to property of the PRIME CONTRACTOR occurring after PRIME CONTRACTOR acceptance of, and resulting from any defects and deficiencies in, services performed or materials furnished under this contract.

(d) The SUBCONTRACTOR shall include this clause, including this paragraph (d), supplemented as necessary to reflect the relationship of the contracting parties, in all lower tier subcontracts over \$25,000.

I.34 Excusable Delays

(a) Except for defaults of lower tier subcontractors, the SUBCONTRACTOR shall not be in default because of any failure to perform this contract under its terms if the failure arises from causes beyond the control and without the fault or negligence of the SUBCONTRACTOR. Examples of these causes are (1) acts of God or of the public enemy, (2) acts of the Government in either its sovereign or contractual capacity, (3) fires, (4) floods, (5) epidemics, (6) quarantine restrictions, (7) strikes, (8) freight embargoes, (9) unusually severe weather. In each instance, the failure to perform must be beyond the control and without the fault or negligence of the SUBCONTRACTOR. "Default" includes failure to make progress in the work so as to endanger performance.

(b) If the failure to perform is caused by the failure of a lower tier subcontractor to perform or make progress, and if the cause of the failure was beyond the control of both the SUBCONTRACTOR and lower tier subcontractor, and without the fault or negligence of either, the SUBCONTRACTOR shall not be deemed to be in default, unless ---

(1) The lower tier subcontracted supplies or services were obtainable from other sources;

(2) The Program Manager ordered the SUBCONTRACTOR in writing to purchase these supplies or services from the other source; and

(3) The SUBCONTRACTOR failed to comply reasonably with this order.

(c) Upon request of the SUBCONTRACTOR, the Program Manager shall ascertain the facts and extent of the failure. If the Program Manager determines that any failure to perform results from one or more of the causes above, the delivery schedule shall be revised, subject to the rights of the PRIME CONTRACTOR under the termination clause of this contract.

I.35 Publicity

(a) The SUBCONTRACTOR agrees not to release any information to the news media regarding the removal or remedial activities being conducted under this contract. All such release of project information shall be made only by the PRIME CONTRACTOR.

I.36 Additional Data Requirements

(a) In addition to the data (as defined in the clause at 52.227-14, Rights in Data-General clause or other equivalent included in this contract) specified elsewhere in this contract to be delivered, the PRIME CONTRACTOR Program Manager may, at any time during contract performance or within a period of 3 years after acceptance of all items to be delivered under this contract, order any data first produced or specifically used in the performance of this contract:

(b) The Rights in Data-General clause or other equivalent included in this contract is applicable to all data ordered under this Additional Data Requirements clause. Nothing contained in this clause shall require the SUBCONTRACTOR to deliver any data the withholding of which is authorized by the Rights in Data-General or other equivalent clause of this contract, or data which are specifically identified in this contract as not subject to this clause.

(c) When data are to be delivered under this clause, the SUBCONTRACTOR will be compensated for converting the data into the prescribed form, for reproduction, and for delivery.

(d) The PRIME CONTRACTOR Program Manager may release the SUBCONTRACTOR from the requirements of this clause for specifically identified data items at any time during the 3-year period set forth in paragraph (a) of this clause.

I.37 Rights In Data - Special Works

(a) *Definitions.*

"Data," as used in this clause, means recorded information regardless of form or the medium on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to contract administration, such as financial, administrative, cost or pricing or management information.

"Unlimited rights," as used in this clause, means the right of the PRIME CONTRACTOR to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

(b) *Allocation of Rights.* (1) The PRIME CONTRACTOR shall have--

(i) Unlimited rights in all data delivered under this contract, and in all data first produced in the performance of this contract, except as provided in paragraph (c) of this clause for copyright.

(ii) The right to limit exercise of claim to copy-right in data first produced in the performance of this contract, and to obtain assignment of copyright in such data, in accordance with subparagraph (c)(1) of this clause.

(iii) The right to limit the release and use of certain data in accordance with paragraph (d) of this clause.

(2) The SUBCONTRACTOR shall have, to the extent permission is granted in accordance with subparagraph (c)(1) of this clause, the right to establish claim to copy right subsisting in data first produced in the performance of this contract.

(c) *Copyright.* (1) *Data first produced in the performance of this contract.*

(i) The SUBCONTRACTOR agrees not to assert, establish, or authorize others to assert or establish, any claim to copyright subsisting in any data first produced in the performance of this contract without prior written permission of the PRIME CONTRACTOR Program Manager. When claim to copyright is made, the SUBCONTRACTOR shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgement of Government sponsorship (including contract number) to such data when delivered to the PRIME CONTRACTOR, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The SUBCONTRACTOR grants to the PRIME CONTRACTOR and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license for all such data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the PRIME CONTRACTOR.

(ii) If the PRIME CONTRACTOR desires to obtain copyright in data first produced in the performance of this contract and permission has not been granted as set forth in subdivision (c)(1)(i) of this clause, the PRIME CONTRACTOR Program Manager may direct the SUBCONTRACTOR to establish, or authorize the establishment of, claim to copyright in such data and to assign, or obtain the assignment of, such copyright to the PRIME CONTRACTOR or its designated assignee.

(2) *Data not first produced in the performance of this contract.* The SUBCONTRACTOR shall not, without prior written permission of the PRIME

CONTRACTOR Program Manager, incorporate in data delivered under this contract any data not first produced in the performance of this contract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the SUBCONTRACTOR identifies such data and grants to the PRIME CONTRACTOR or acquires on its behalf, a license of the same scope as set forth in subparagraph (c)(1) of this clause.

(d) *Release and use restrictions.* Except as otherwise specifically provided for in this contract, the SUBCONTRACTOR shall not use for purposes other than the performance of this contract, nor shall the SUBCONTRACTOR release, reproduce, distribute, or publish any data first produced in the performance of this contract, nor authorize others to do so, without written permission of the PRIME CONTRACTOR Program Manager.

(e) *Indemnity.* The SUBCONTRACTOR shall indemnify the PRIME CONTRACTOR and its officers, agents, and employees acting for the PRIME CONTRACTOR against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this contract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless the PRIME CONTRACTOR provides notice to the SUBCONTRACTOR as soon as practicable of any claim or suit, affords the SUBCONTRACTOR an opportunity under applicable laws, rules, or regulations to participate in the defense thereof, and obtains the SUBCONTRACTOR's consent to the settlement of any suit or claim other than as required by final decree of a court of competent jurisdiction; nor do these provisions apply to material furnished to the SUBCONTRACTOR by the PRIME CONTRACTOR and incorporated in data to which this clause applies.

I.38 Convict Labor

The SUBCONTRACTOR agrees not to employ any person undergoing sentence of imprisonment in performing this contract except as provided by 18 U.S.C. 4082(c)(2) and Executive Order 11755, December 29, 1973.

I.39 Notice to the PRIME CONTRACTOR of Labor Disputes

(a) If the SUBCONTRACTOR has knowledge that any actual or potential labor dispute is delaying or threatens to delay the timely performance of this contract, the SUBCONTRACTOR shall immediately give notice, including all relevant information, to the PRIME CONTRACTOR Program Manager.

(b) The SUBCONTRACTOR agrees to insert the substance of this clause, including this paragraph (b), in any lower tier subcontract to which a labor dispute may delay the timely performance of this contract; except that each lower tier subcontract shall provide that in the event its timely performance is delayed or threatened by delay by any actual or potential labor dispute, the lower tier subcontractor shall immediately notify the next higher tier subcontractor or the PRIME CONTRACTOR, as the case may be, of all relevant information concerning the dispute.

I.40 Disputes

(a) All disputes arising under or relating to this contract shall be resolved under this clause

(b) "Claim," as used in this clause, means a written demand or written assertion by one of the contracting parties seeking, as a matter of right, the payment of money in a sum certain, the adjustment or interpretation of contract terms, or other relief arising under or relating to this contract. A claim arising under a contract, unlike a claim relating to that contract, is a claim that can be resolved under a contract clause that provides for the relief sought by the claimant. However, a written demand or written assertion by the SUBCONTRACTOR seeking the payment of money exceeding \$50,000 is not a claim under this clause until certified as required by subparagraph (c)(2) below. A voucher, invoice, or other routine request for payment that is not in dispute when submitted is not a claim under this clause. The submission may be converted to a claim under this clause, by complying with the submission and certification requirements of this clause, if it is disputed either as to liability or amount or is not acted upon in a reasonable time.

(c) (1) A claim by the SUBCONTRACTOR shall be made in writing and submitted to the PRIME CONTRACTOR Program Manager for a written decision. A claim by the PRIME CONTRACTOR against the SUBCONTRACTOR shall be subject to a written decision by the PRIME CONTRACTOR Program Manager.

(2) For SUBCONTRACTOR claims exceeding \$50,000, the SUBCONTRACTOR shall submit with the claim a certification that--

- (i) The claim is made in good faith;
- (ii) Supporting data are accurate and complete to the best of the SUBCONTRACTOR's knowledge and belief; and
- (iii) The amount requested accurately reflects the contract adjustment for which the SUBCONTRACTOR believes the PRIME CONTRACTOR is liable.

(3) (i) If the SUBCONTRACTOR is an individual, the certification shall be executed by that individual.

(ii) If the SUBCONTRACTOR is not an individual, the certification shall be executed by

(A) A senior company official in charge at the SUBCONTRACTOR's plant or location involved; or

(B) An officer or general partner of the SUBCONTRACTOR having overall responsibility for the conduct of the SUBCONTRACTOR's affairs.

(d) For SUBCONTRACTOR claims of \$50,000 or less, the PRIME CONTRACTOR Program Manager must, if requested in writing by the SUBCONTRACTOR, render a decision within 60 days of the request. For SUBCONTRACTOR-certified claims over \$50,000, the PRIME CONTRACTOR Program Manager must, within 60 days, decide the claim or notify the SUBCONTRACTOR of the date by which the decision will be made.

(e) The PRIME CONTRACTOR Program Manager's decision shall be final unless the SUBCONTRACTOR appeals as provided in this paragraph (e). The SUBCONTRACTOR shall not have the right of direct appeal to the AGENCY. In the event the SUBCONTRACTOR elects to appeal a decision of the PRIME CONTRACTOR Program Manager, the PRIME CONTRACTOR shall, subject to the following, either authorize an appeal in the PRIME CONTRACTOR'S name, or bring an appeal on behalf of the SUBCONTRACTOR.

(1) The PRIME CONTRACTOR shall cooperate in the preparation and presentation of the SUBCONTRACTOR'S claim against the PRIME CONTRACTOR.

(2) The SUBCONTRACTOR shall indemnify the PRIME CONTRACTOR for all expenses, costs, liability, damages, judgments and awards, including attorney fees, arising out of the SUBCONTRACTOR'S appeal, and including, without limitation, any liability accruing to the PRIME CONTRACTOR for certifying the SUBCONTRACTOR'S claim on behalf of the SUBCONTRACTOR.

(3) All actions taken by the PRIME CONTRACTOR pursuant to this paragraph (e), including matters relating to the applicable statute of limitations and choice of forum, shall be pursuant to the written direction of SUBCONTRACTOR.

(f) The PRIME CONTRACTOR shall pay interest on the amount found due and unpaid from (1) the date the PRIME CONTRACTOR Program Manager receives the claim (properly certified if required), or (2) the date payment otherwise would be due, if that date is later, until the date of payment. Simple interest on claims shall be paid at the rate of one percent (1%) per month during the pendency of the claim.

(g) The SUBCONTRACTOR shall proceed diligently with performance of this contract, pending final resolution of any request for relief, claim, appeal, or action arising under the contract, and comply with any decision of the PRIME CONTRACTOR Program Manager.

(h) Under no circumstances shall the PRIME CONTRACTOR be obligated to pay the SUBCONTRACTOR as a result of AGENCY actions unless and until the PRIME CONTRACTOR receives the amount claimed by the SUBCONTRACTOR from the AGENCY. If the AGENCY fails to pay the amount claimed by the SUBCONTRACTOR, the PRIME CONTRACTOR shall have no further liability to the SUBCONTRACTOR.

I.41 Termination

The PRIME CONTRACTOR's Program Manager, by written notice, may terminate this contract, in whole or in part, when it is in the PRIME CONTRACTOR's interest. If this contract is terminated, the PRIME CONTRACTOR shall be liable only for payment under the payment provisions of this contract for services rendered before the effective date of termination.

I.42 Davis-Bacon Act

(a) all laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less than once a week, and without subsequent deduction or rebate on an account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of labor which will be attached hereto and made a part hereof, when appropriate, regardless of any contractual relation which may be alleged to exist between the SUBCONTRACTOR and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b) (2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (d) of this clause; also, regular contributions made or costs incurred for more than a

weekly period (but less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such period. Such laborers and mechanics shall be paid not less than the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in the clause entitled "Apprentices and Trainees". Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (b) of this clause) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the SUBCONTRACTOR and its lower tier subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(b) (1) The PRIME CONTRACTOR Program Manager shall require that any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The PRIME CONTRACTOR Program Manager shall approve an additional classification and wage rate and fringe benefits therefore only when all the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination.

(ii) The classification is utilized in the area by the construction industry.

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the SUBCONTRACTOR and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the PRIME CONTRACTOR Program Manager agree on the classification and wage rate (including the amount designated for fringe benefits, where appropriate), a report of the action taken shall be sent by the PRIME CONTRACTOR Program Manager to the Contracting Officer for forwarding to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the PRIME CONTRACTOR Program Manager through the Contracting Officer or will notify

the PRIME CONTRACTOR Program Manager through the Contracting Officer within the 30-day period that additional time is necessary.

(3) In the event the SUBCONTRACTOR, the laborers or mechanics to be employed in the classification or their representatives, and the PRIME CONTRACTOR Program Manager and Contracting Officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting Officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting Officer, to the Administrator for determination. The Administrator will issue a determination within 30 days of receipt and so advise the PRIME CONTRACTOR Program Manager through the Contracting Officer or will notify the PRIME CONTRACTOR Program Manager through the Contracting Officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (b) (2) or (b) (3) of this clause, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(c) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the SUBCONTRACTOR shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(d) If the SUBCONTRACTOR does not make payments to a trustee or other third person, the SUBCONTRACTOR may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program; provided, that the Secretary of Labor has found, upon the written request of the SUBCONTRACTOR, that applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor through the PRIME CONTRACTOR Program Manager may require the SUBCONTRACTOR to set aside in a separate account assets for the meeting of obligations under the plan or program.

I.43 Contract Work Hours and Safety Standards Act--Overtime Compensation (Construction)

(a) Overtime requirements. No SUBCONTRACTOR or lower tier subcontractor contracting for any part of the contract Work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work

in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half time the basic rate of pay for all hours worked in excess of forty hours in a workweek.

(b) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the provisions set forth in paragraph (a) of this clause, the SUBCONTRACTOR and any lower tier subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such SUBCONTRACTOR and lower tier subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such district or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic* employed in violation of the provisions set forth in paragraph (a) of this clause, in the sum of \$10 for each calendar day for which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by provisions set forth in paragraph (a) of this clause.

(c) Withholding for unpaid wages and liquidated damages. The PRIME CONTRACTOR Program Manager shall upon his/her own action or upon written request of the Contracting Officer withhold or cause to be withheld, from any moneys payable on account of work performed by the SUBCONTRACTOR or lower tier subcontractor under any such contract or any other Federal contract with the same SUBCONTRACTOR, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same SUBCONTRACTOR, such sums as may be determined to be necessary to satisfy any liabilities of such SUBCONTRACTOR or lower tier subcontractor for unpaid wages and liquidated damages as provided in the provisions set forth in paragraph (b) of this clause.

(d) Payrolls and Basic Records. (1) The SUBCONTRACTOR or lower tier subcontractor shall maintain payrolls and basic payroll records during the course of contract Work and shall preserve them for a period of 3 years from the completion of the contract for all laborers and mechanics working on the contract. Such records shall contain the name and address of each employee, social security number, correct classifications, hourly rates or wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Nothing in this paragraph shall require the duplication of records required to be maintained for construction work by Department of Labor regulations at 29 CFR 5.5 (a) (3) implementing the Davis-Bacon Act. (2) The records to be maintained under paragraph (d) (1) of this clause shall be made available by the SUBCONTRACTOR or lower tier subcontractor for inspection, copying, or transcription by authorized representatives of the PRIME CONTRACTOR Program Management Office or the Contracting Officer or the Department of

Labor. The SUBCONTRACTOR shall permit such representatives to interview employees during working hours on the job.

(e) Lower tier subcontracts. The SUBCONTRACTOR shall insert in any lower tier subcontracts the provisions set forth in paragraphs (a) through (e) of this clause and also a clause requiring the lower tier subcontractors to include these provisions any further lower tier subcontracts. The SUBCONTRACTOR shall be responsible for compliance by any lower tier subcontractor with the provisions set forth in paragraphs (a) through (e) of this clause.

* To include watchmen and guards

I.44 Apprentices and Trainees

(a) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeships Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ration of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the SUBCONTRACTOR as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in this paragraph shall be paid not less than the applicable wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a SUBCONTRACTOR is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman hourly rate) specified in the SUBCONTRACTOR's or lower tier subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid in the full amount of fringe

benefits listed on the wage determination for the applicable classification. If the administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the SUBCONTRACTOR will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(b) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidence by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journey man hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on a job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination of the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the SUBCONTRACTOR will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(c) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

I.45 Payrolls and Basic Records

(a) Payrolls and basic records relating thereto shall be maintained by the SUBCONTRACTOR during the course of the work and preserved for a period of 3 years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rate of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1 (b) 2 (B) of the Davis-Bacon Act), daily and weekly numbers of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under paragraph (d) of the clause entitled "Davis-Bacon Act" that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in approving benefits under a plan or program described in section 1 (b) (2) (B) of the Davis-Bacon Act, the SUBCONTRACTOR shall maintain record which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. SUBCONTRACTORS employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(b) (1) The SUBCONTRACTOR shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the PRIME CONTRACTOR Program Manager or duly authorized representative. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under paragraph (a) of this clause. The information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402. The SUBCONTRACTOR is responsible for the submission of copies of payroll by all lower tier subcontractors.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance", signed by the SUBCONTRACTOR or lower tier subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify.

(i) That the payroll for the payroll period contains the information required to be maintained under paragraph (a) of this clause and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during he payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions a set forth in Regulations, 29 CFR Part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or case equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (b) (2) of this clause.

(4) The falsification of any of the certifications in this clause may subject the SUBCONTRACTOR or lower tier subcontractor to civil or criminal prosecution under Section 1001 of Title 19 and Section 3729 of Title 31 of the United States Code.

(c) The SUBCONTRACTOR or lower tier subcontractor shall make the records required under paragraph (a) of this clause available for inspection, copying, or transcription by the PRIME CONTRACTOR Program Manager, duly authorized representative of the PRIME CONTRACTOR Program Management Office, Contracting Officer or authorized representative of the Contracting Officer or the Department of Labor to interview employees during work hours on the job. If the SUBCONTRACTOR or lower tier subcontractor fails to submit required records or to make them available, the PRIME CONTRACTOR Program Manager may, after written notice to the SUBCONTRACTOR, take such action as may be necessary to cause the suspension of any further payment. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

I.46 Compliance with Copeland Act Requirement

The SUBCONTRACTOR shall comply with the requirements of 29 CFR Part 3, which are hereby incorporated by reference in this contract.

I.47 Withholding of Funds

The PRIME CONTRACTOR Program Manager shall upon his/her own action or upon written request of Contracting Officer withhold or cause to be withheld from the SUBCONTRACTOR under this contract or any another Federal contract with the same SUBCONTRACTOR, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements which is held by the same SUBCONTRACTOR, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers employed by the SUBCONTRACTOR or any lower tier subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the Work all or part of the wages required by the contract, the PRIME CONTRACTOR Program Manager may, after written notice to the SUBCONTRACTOR, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

I.48 Subcontracts (Labor Standards)

(a) The SUBCONTRACTOR or lower tier subcontractor shall insert in any lower tier subcontracts the clauses entitled "Davis Bacon Act", "Contract Work Hours and Safety Standards Act--Overtime Compensation", "Apprentices and Trainees", "Payrolls and Basic Records", "Compliance with Copeland Act Requirements", "Withholding of Funds", Subcontracts (Labor Standards)", "Contract Termination: Debarment", "Disputes Concerning Labor Standards", "Compliance with Davis-Bacon and Related Act Requirements", and "Certification of Eligibility", and such other clauses as the PRIME CONTRACTOR Program Manager may, by appropriate instructions require, and also a clause requiring the SUBCONTRACTOR to include these clauses in any lower tier subcontracts. The SUBCONTRACTOR shall be responsible for compliance by any lower tier subcontractor with all the contract clauses in this paragraph.

(b) (1) Within 7 days after award of the contract, the SUBCONTRACTOR shall deliver to the PRIME CONTRACTOR Program Manager a completed Statement and Acknowledgement Form (SF 1413) for each subcontract, including the SUBCONTRACTOR's signed and dated acknowledgement of the clauses set forth in paragraph (a) of this clause have been included in the subcontract. (2) Within 14 days after award of any subsequently awarded subcontracts, the SUBCONTRACTOR shall deliver to the PRIME CONTRACTOR Program Manager an updated, completed SF 1413 for such additional subcontract.

I.49 Contract Termination: Debarment

A breach of the contract clauses entitled "Davis-Bacon Act", "Contract Work Hours and Safety Standards Act--Overtime Compensation", "Apprentices and Trainees", "Payrolls and Basic Records", "Compliance with Copeland Act Requirements", "Subcontracts (Labor Standards)," "Compliance with Davis-Bacon and Related Act Requirements", and "Certification of Eligibility", may be grounds for termination of the contract, and for debarment as a contractor and a SUBCONTRACTOR as provided in 29 CFR 5.12.

I.50 Disputes Concerning Labor Standards

The United States Department of Labor has set forth in 29 CFR Parts 5, 6, and 7 procedures for resolving disputes concerning labor standards requirements. Such disputes shall be resolved in accordance with those procedures and not the Disputes clause of this contract. Disputes within the meaning of this clause include disputes between the SUBCONTRACTOR (or any of its lower tier subcontractors) the PRIME CONTRACTOR, the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

I.51 Compliance with Davis-Bacon and Related Act Requirements

All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

I.52 Certification of Eligibility

(a) By entering into this contract, the SUBCONTRACTOR certifies that neither it (nor he or she) nor any person or firm who has interest in the SUBCONTRACTOR's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a) (1).

(b) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a) (1).

(c) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

GENERAL WAGE DECISION NO. MI91-7

Supersedes General Wage Decision No. MI90-7

State: MICHIGAN

County(ies): STATEWIDE

Construction
Type: AIRPORT, BRIDGE, HIGHWAY AND SEWERConstruction
Description: AIRPORT, BRIDGE, HIGHWAY, AND SEWER CONSTRUCTION
(Exclusive of Buildings) (does not include
TV/Grout work).

Modification Record:

No.	Publication Date	Page No.(s)
1	Apr. 19, 1991	521,523-524 529
2	May 24, 1991	516
3	May 31, 1991	516-534
4	June 21, 1991	516-534
5	July 26, 1991	513
6	Nov. 1, 1991	516-534d
7	Nov. 22, 1991	516
8	Nov. 29, 1991	515-520
9	Jan. 3, 1992	516-534b

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	BASIC HOURLY RATES	FRINGE BENEFITS
CARPENTERS	17.71	3.40
CEMENT MASONS:		
(Cement Masonry related to Highway, Road and Street Construction):		
General contracts over \$500,000:		
Area 1	18.62	3.40
Area 2	17.79	3.40
General contracts \$500,000 or less:		
Area 1	16.78	3.40
Area 2	14.26	3.40
General contracts \$50,000 or less:		
Area 1	16.78	3.40
Area 2	13.26	3.40
*DIVERS:		
DIVER	28.16	9.31
DIVER TENDER	20.63	9.31
IRONWORKERS; STRUCTURAL & REINFORCING:		
AREA 1:		
General Contracts \$7 million or greater	17.92	7.04
General Contracts less than \$7 million	16.56	7.04
AREA 2:		
Machinery movers, riggers and machinery erectors	15.75	5.81
AREA 3	14.80	7.16
AREA 4:		
All work pertaining to metal fence and guard- rails and all their accessories and related components on highway and airport and sewer work	15.66	4.75
All other work	20.63	4.75
AREA 5:		
Riggers	18.67	9.83
Ornamental, structural, precast erector and welder	18.386	.13+58.11%
Sheeter	18.636	.13+58.11%
Sheeter bucket-up	18.506	.13+58.11%
Fence erector	12.64	7.28
Siding & decking	14.6282	.13+60.27%
Reinforcing	16.09	6.45+38.64%
LINE CONSTRUCTION:		
AREA 1:		
Line worker; Technician	22.32	2.20 + 13.5%
Cable Splicer	23.21	2.20 + 13.5%
Combination Equipment Operator		

*316 (Jan. 3, 1992)

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and Groundman	17.99	2.20 + 13.5%
Combination Driver - Groundman	16.99	2.20 + 13.5%
Groundman	15.69	2.20 + 13.5%
AREA 2:		
Lineworker; Technician	16.60	1.25+ 8.5%+ A
Cable Splicer	17.28	1.25+ 8.5%+ A
Combination Digger Operator or Tractor Operator	12.93	1.25+ 8.5%+ A
Light Equipment Operator, Groundman Distribution Line Truck Driver/ Operator, Groundman	11.35	1.25+ 8.5%+ A
Combination Winch Truck Driver/ Groundman	10.82	1.25+ 8.5%+ A
Combination Truck Driver/Groundman	9.16	1.25+ 8.5%+ A
PAINTERS:		
AREA 1:		
Group 1	12.95	1.97
Group 2	13.20	1.97
Group 3	13.45	1.97
Group 4	13.95	1.97
Group 5	17.05	3.80
Group 6	14.45	1.97
Group 7	15.75	1.97
AREA 2:		
Brush, pan roller, taping and sign	14.19	2.25
Spray, sand blasting and swing stage	15.39	2.25
Steeplejack	15.04	2.25
Mechanical roller	14.89	2.25
Vinyl hanger	14.39	2.25
AREA 3:		
Brush and roller	13.50	
Structural steel-brush; mechanical pressure roller; paperhanging; sign and pictorial; drywall	14.00	
Spray; sand blasting; hydroblast, steam clean, power grinders and tools	14.50	
Painting and sand blasting inside tanks and vessels and penstocks and tubes; steeplejack	15.50	
Commercial repaint:		
Brush	9.25	
Spray	9.75	
AREA 4	16.26	2.72
AREA 5:		
Brush	17.05	5.305
Spray	17.85	5.305
AREA 6:		

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Brush and roller	14.50	2.96
Paper and vinyl hangers; Sand- blasting, steam cleaning & acid cleaning, swing stage, boatswain chair, window jacks, brush & preparatory work above 30 ft. in height (additional 10 cents per hour for each additional 15 ft.	14.80 15.30	2.96 2.96
Pressure roller	15.30	2.96
Spray gun work and spray helpers, pick pullers; Hazardous work: steeple jack, tanks, gas holders, stacks, flag poles, radio towers and beacons, power- line towers and bridges	15.00 15.30	2.96 2.96
Application of paint by mitt	15.30	2.96
AREA 7:		
New construction:		
Brush, roller, mitts, drywall taping	14.18	3.01
Wall covering	14.48	3.01
Spray, sandblast, swing stage, boatswain chair, spider; elevated water towers, radio towers, power line towers, steeples, smoke stacks, bridges over water or moving traffic and tanks over 40 ft.	14.93	3.01
Hazardous work	15.18	3.01
Repaint work:		
Brush, roller, mitts, drywall taping	12.76	3.01
Wall covering	13.06	3.01
Spray, sandblast, swing stage, boatswain chair, spider; elevated water towers, radio towers, power line towers, steeples, smoke stacks, bridges over water or moving traffic and tanks over 40 ft.	13.51	3.01
Hazardous work	13.76	3.01
AREA 8:		
Brush	15.65	2.81
Spray	16.55	2.81
AREA 9:		
Brush; Roller	14.01	
Sandblasting; Steamcleaning; Water- blasting; Spray	14.75	
FLAG & SIGNAL PERSON	7.22	
LABORERS: AIRPORT, BRIDGE, & HIGHWAY CONSTRUCTION:		

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Pavement Markers:

Area 1:

Group 1

12.84 2.64

Group 2

9.82 2.64

Area 2:

Group 1

11.94 2.64

Group 2

8.94 2.64

LABORERS: AIRPORT, BRIDGE, & HIGHWAY
CONSTRUCTION:

General Contracts over \$500,000:

AREA 1:

Class A

15.98 3.88

Class B

15.68 3.88

Class B-1

15.47 3.88

Class B-2

15.21 3.88

Class C

15.39 3.88

Class D

15.21 3.88

Class E

15.11 3.88

Class F

15.08 3.88

AREA 2:

Class A

15.01 3.88

Class B

14.67 3.88

Class B-1

14.80 3.88

Class B-2

14.54 3.88

Class C

14.45 3.88

Class D

14.21 3.88

Class E

14.15 3.88

Class F

14.01 3.88

AREA 2A:

Class A

14.43 3.88

Class B

14.13 3.88

Class B-1

14.21 3.88

Class B-2

13.96 3.88

Class C

13.86 3.88

Class D

13.65 3.88

Class E

13.56 3.88

Class F

13.45 3.88

AREA 3:

Class A

14.27 3.88

Class B

13.84 3.88

Class B-1

14.22 3.88

Class B-2

13.99 3.88

Class C

13.78 3.88

Class D

13.49 3.88

Class E

13.35 3.88

Class F

13.28 3.88

AREA 3A:

Class A

14.03 3.88

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Class B	13.60	3.88
Class B-1	14.00	3.88
Class B-2	13.74	3.88
Class C	13.52	3.88
Class D	13.24	3.88
Class E	13.11	3.88
Class F	13.02	3.88
AREA 4:		
Class A	14.27	3.88
Class B	13.84	3.88
Class B-1	14.22	3.88
Class B-2	13.99	3.88
Class C	13.78	3.88
Class D	13.49	3.88
Class E	13.35	3.88
Class F	13.28	3.88

General Contracts \$500,000 and less,
but greater than \$50,000:

AREA 1:		
Class A	14.21	3.88
Class B	13.94	3.88
Class B-1	13.75	3.88
Class B-2	13.51	3.88
Class C	13.68	3.88
Class D	13.51	3.88
Class E	13.42	3.88
Class F	13.40	3.88

AREA 2:		
Class A	11.67	3.88
Class B	11.40	3.88
Class B-1	11.50	3.88
Class B-2	11.29	3.88
Class C	11.22	3.88
Class D	11.03	3.88
Class E	10.98	3.88
Class F	10.87	3.88

AREA 2A:		
Class A	11.21	3.88
Class B	10.96	3.88
Class B-1	11.03	3.88
Class B-2	10.83	3.88
Class C	10.75	3.88
Class D	10.58	3.88
Class E	10.51	3.88
Class F	10.42	3.88

AREA 3:		
Class A	11.07	3.88

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Class B	10.72	3.88
Class B-1	11.03	3.88
Class B-2	10.84	3.88
Class C	10.68	3.88
Class D	10.44	3.88
Class E	10.33	3.88
Class F	10.28	3.88
AREA 3A:		
Class A	10.90	3.88
Class B	10.55	3.88
Class B-1	10.87	3.88
Class B-2	10.67	3.88
Class C	10.49	3.88
Class D	10.27	3.88
Class E	10.16	3.88
Class F	10.09	3.88
AREA 4:		
Class A	12.11	3.88
Class B	11.68	3.88
Class B-1	12.06	3.88
Class B-2	11.83	3.88
Class C	11.62	3.88
Class D	11.33	3.88
Class E	11.19	3.88
Class F	11.12	3.88

General Contracts \$50,000 and less:

AREA 1:		
Class A	14.21	3.88
Class B	13.94	3.88
Class B-1	13.75	3.88
Class B-2	13.51	3.88
Class C	13.68	3.88
Class D	13.51	3.88
Class E	13.42	3.88
Class F	13.40	3.88
AREA 2:		
Class A	10.67	3.88
Class B	10.40	3.88
Class B-1	10.50	3.88
Class B-2	10.29	3.88
Class C	10.22	3.88
Class D	10.03	3.88
Class E	9.98	3.88
Class F	9.87	3.88
AREA 2A:		
Class A	10.21	3.88
Class B	9.96	3.88

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Class B-1	10.03	3.88
Class B-2	9.83	3.88
Class C	9.75	3.88
Class D	9.58	3.88
Class E	9.51	3.88
Class F	9.42	3.88

AREA 3:

Class A	10.07	3.88
Class B	9.72	3.88
Class B-1	10.03	3.88
Class B-2	9.84	3.88
Class C	9.68	3.88
Class D	9.44	3.88
Class E	9.33	3.88
Class F	9.28	3.88

AREA 3A:

Class A	9.90	3.88
Class B	9.55	3.88
Class B-1	9.87	3.88
Class B-2	9.67	3.88
Class C	9.49	3.88
Class D	9.27	3.88
Class E	9.16	3.88
Class F	9.09	3.88

AREA 4:

Class A	12.11	3.88
Class B	11.68	3.88
Class B-1	12.06	3.88
Class B-2	11.83	3.88
Class C	11.62	3.88
Class D	11.33	3.88
Class E	11.19	3.88
Class F	11.12	3.88

LANDSCAPE LABORERS - HIGHWAY CONSTRUCTION
ORNAMENTAL PROJECTS ONLY (for sodding and
seeding, See Class F Laborer - Misc.,
Unskilled Labor)

AREA 1:

Class A	10.23	I
Class B	7.98	I

AREA 2:

Class A	9.78	I
Class B	7.53	I

LABORERS: OPEN CUT CONSTRUCTION:

General contracts over \$400,000:

Zone 1:

Class 1	14.20	5.97
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Class 2	14.31	5.97
Class 3	14.36	5.97
Class 4	14.44	5.97
Class 5	14.50	5.97
Zone 2:		
Class 1	13.82	4.02
Class 2	13.93	4.02
Class 3	13.98	4.02
Class 4	14.05	4.02
Class 5	14.10	4.02
Zone 3:		
Class 1	13.87	4.02
Class 2	13.98	4.02
Class 3	14.10	4.02
Class 4	14.17	4.02
Class 5	14.32	4.02
Zone 4:		
Class 1	13.36	4.02
Class 2	13.50	4.02
Class 3	13.62	4.02
Class 4	13.67	4.02
Class 5	13.81	4.02
Zone 5:		
Class 1	13.87	4.02
Class 2	13.98	4.02
Class 3	14.10	4.02
Class 4	14.17	4.02
Class 5	14.32	4.02
Zone 6:		
Class 1	13.42	4.57
Class 2	13.55	4.57
Class 3	13.65	4.57
Class 4	13.72	4.57
Class 5	13.87	4.57
Zone 7:		
Class 1	13.76	4.02
Class 2	13.90	4.02
Class 3	14.02	4.02
Class 4	14.07	4.02
Class 5	14.21	4.02
Zone 8:		
Class 1	12.26	4.02
Class 2	12.37	4.02
Class 3	12.48	4.02
Class 4	12.57	4.02
Class 5	12.69	4.02
Zone 9:		
Class 1	11.21	4.02

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Class 2	11.37	4.02
Class 3	11.48	4.02
Class 4	11.53	4.02
Class 5	11.66	4.02
Zone 10:		
Class 1	10.79	4.02
Class 2	10.92	4.02
Class 3	11.04	4.02
Class 4	11.11	4.02
Class 5	11.21	4.02
Zone 11:		
Class 1	12.40	4.02
Class 2	12.54	4.02
Class 3	12.67	4.02
Class 4	12.72	4.02
Class 5	12.77	4.02

LABORERS: TUNNEL, SHAFT & CAISSON
CONSTRUCTION:

Zone 1:		
Class 1	14.35	5.97
Class 2	14.46	5.97
Class 3	14.52	5.97
Class 4	14.70	5.97
Class 5	14.96	5.97
Class 6	15.28	5.97
Zone 2:		
Class 1	15.07	4.02
Class 2	15.16	4.02
Class 3	15.26	4.02
Class 4	15.42	4.02
Class 5	15.68	4.02
Class 6	15.99	4.02
Zone 3:		
Class 1	14.60	4.57
Class 2	14.68	4.57
Class 3	14.76	4.57
Class 4	14.92	4.57
Class 5	15.18	4.57
Class 6	15.49	4.57

*POWER EQUIPMENT OPERATORS:

AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION:

ZONE 1:

General contracts over \$500,000:

GROUP 1	16.85	13%+6.17
GROUP 2	15.04	13%+6.17
GROUP 3	14.59	13%+6.17
GROUP 4	14.46	13%+6.17

General contracts \$500,000 or less:

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GROUP 1	13.96	13%+6.17
GROUP 2	14.15	13%+6.17
GROUP 3	13.71	13%+6.17
GROUP 4	13.58	13%+6.17
ZONE 2:		
General contracts over \$500,000		
GROUP 1	16.85	13%+6.17
GROUP 2	14.92	13%+6.17
GROUP 3	14.48	13%+6.17
GROUP 4	14.23	13%+6.17
General contracts \$500,000 or less		
GROUP 1	15.52	13%+6.17
GROUP 2	13.59	13%+6.17
GROUP 3	13.15	13%+6.17
GROUP 4	12.90	13%+6.17
General contracts of \$50,000 or less:		
ZONE 2 ONLY:		
GROUP 1	14.64	13%+6.17
GROUP 2	12.71	13%+6.17
GROUP 3	12.27	13%+6.17
GROUP 4	12.02	13%+6.17
POWER EQUIPMENT OPERATORS:		
UNDERGROUND CONSTRUCTION (INCLUDES SEWER CONSTRUCTION):		
General contracts over \$400,000		
Zone 1:		
Class 1	18.60	13%+6.17
Class 2	16.89	13%+6.17
Class 3	16.25	13%+6.17
Class 4	15.74	13%+6.17
Zone 2:		
Class 1	17.09	13%+6.17
Class 2	15.24	13%+6.17
Class 3	14.80	13%+6.17
Class 4	14.55	13%+6.17
General contracts \$400,000 or less:		
Zone 1:		
Class 1	17.72	13%+6.17
Class 2	16.01	13%+6.17
Class 3	15.36	13%+6.17
Class 4	14.86	13%+6.17
Zone 2:		
Class 1	15.76	13%+6.17
Class 2	13.91	13%+6.17
Class 3	13.47	13%+6.17
Class 4	13.22	13%+6.17
POWER EQUIPMENT OPERATORS:		
STEEL ERECTION:		

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ZONE 1:

CLASS 1	22.68	13%+6.17
CLASS 2	23.57	13%+6.17
CLASS 3	22.44	13%+6.17
CLASS 4	23.33	13%+6.17
CLASS 5	22.04	13%+6.17
CLASS 6	22.93	13%+6.17
CLASS 7	21.40	13%+6.17
CLASS 8	22.28	13%+6.17
CLASS 9	21.08	13%+6.17
CLASS 10	21.96	13%+6.17
CLASS 11	20.51	13%+6.17
CLASS 12	15.55	13%+6.17
CLASS 13	14.43	13%+6.02

ZONE 2:

CLASS A	20.52	13%+6.15
CLASS B	20.27	13%+6.15
CLASS C	19.77	13%+6.15
CLASS D	17.12	13%+6.15
CLASS E	15.77	13%+6.15
CLASS F	14.17	13%+6.00

ZONE 3:

GROUP 1	14.17	4.30+ 13%
GROUP 2	12.44	4.30+ 13%
GROUP 3	11.34	4.30+ 13%

SIGN INSTALLERS:

Zone 1:

General contracts over \$400,000:		
Group 1	14.0575	131.70
Group 2	13.8075	131.70
General contracts of \$400,000 or less:		
Group 1	12.8075	131.70
Group 2	12.5575	131.70

Zone 2:

General contracts over \$400,000:		
Group 1	16.0375	131.70
Group 2	12.8175	131.70
General contracts of \$400,000 or less:		
Group 1	10.5675	131.70
Group 2	10.3175	131.70
General contracts of \$50,000 or less:		
Group 1	10.0675	131.70
Group 2	9.8175	131.70

* TRUCK DRIVERS:

AIRPORT, BRIDGES, & HIGHWAY CONSTRUCTION:

Area 1:

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Contracts over \$500,000:		
Trucks under 8 cu. yd.	16.93	177.70/wk
Truck, 8 cu. yds & over	17.03	177.70/wk
Euclids, double bottoms & lowboys	17.18	177.70/wk
Contracts \$500,000 or less:		
Trucks under 8 cu. yd.	15.68	177.70/wk
Trucks, 8 cu. yds. & over	15.78	177.70/wk
Euclids, double bottoms & lowboys	15.93	177.70/wk
Area 2:		
Contracts over \$500,000:		
Trucks under 8 cu. yd.	16.93	177.70/wk
Trucks, 8 cu. yds. & over	16.93	177.70/wk
Euclids, double bottoms & lowboys	17.08	177.70/wk
Contracts \$500,000 or less:		
Trucks under 8 cu. yd.	14.33	177.70/wk
Trucks, 8 cu. yds. & over	14.43	177.70/wk
Euclids, double bottoms & lowboys	14.58	177.70/wk
Contracts \$500,000 or less:		
Trucks under 8 cu.yd.	13.83	177.70/wk
Trucks, 8 cu. yds. & over	13.93	177.70/wk
Euclids, double bottoms & lowboys	14.08	177.70/wk

*TRUCK DRIVERS:

UNDERGROUND CONSTRUCTION

Area 1:

Group 1	16.22	177.70/wk
Group 2	16.36	177.70/wk
Group 3	16.55	177.70/wk

Area 2:

Group 1	16.22	177.70/wk
Group 2	16.26	177.70/wk
Group 3	16.37	177.70/wk

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

FOOTNOTES:

+

A. SEVEN PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Day After Thanksgiving, and Christmas Day (Provided the employee worked the scheduled work day preceding and following the day observed)

B. \$99.50 per week per employee

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- C. \$161.70 per week per employee
- D. \$65.00 per week per employee
- E. \$89.50 per week per employee
- F. \$76.50 per week per employee
- G. \$98.50 per week per employee
- H. \$80.50 per week per employee
- I. Six Paid Holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day.

AREA DESCRIPTIONS

CEMENT MASONS:

- AREA 1: Genesee, Livingston, Macomb, Monroe, Oakland, Saginaw, Washtenaw, and Wayne Counties
- AREA 2: Remainder of State

IRONWORKERS:

- AREA 1: Alger, Baraga, Chippewa, Delta, Dickinson, Gogebic, Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee, Ontonagon, and Schoolcraft Counties
- AREA 2: Allegan, Antrim, Barry, Benzie, Branch, Calhoun, Charlevoix, Eaton, Emmet, Grand Traverse, Hillsdale, Ionia, Kalamazoo, Kalkaska, Kent, Lake, Leelanau, Manistee, Mason, Mecosta, Missaukee, Montcalm, Muskegon, Newaygo, Oceana, Osceola, Ottawa, St. Joseph, Van Buren, and Wexford Counties
- AREA 3: Berrien and Cass Counties
- AREA 4: Lenawee and Monroe Counties
- AREA 5: Remainder of State

LABORERS: AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION

LABORERS: PAVEMENT MARKERS:

- AREA 1: Lenesee, Macomb, Monroe, Oakland, Washtenaw and Wayne Counties
- AREA 2: Remainder of State

LABORERS: AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION

- AREA 1: Genesee, Macomb, Monroe, Oakland, Washtenaw, and Wayne Counties
- AREA 2: Allegan, Barry, Bay, Berrien, Branch, Calhoun, Cass, Clinton, Eaton, Gratiot, Hillsdale, Huron, Ingham, Jackson, Kalamazoo, Lapeer, Lenawee, Livingston, Midland, Muskegon,

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Saginaw, Shiawassee, St. Clair, St. Joseph, Tuscola, and Van Buren Counties

AREA 2A: Ionia, Kent, Montcalm, and Ottawa Counties

AREA 3: Alcona, Alger, Alpena, Antrim, Arenac, Baraga, Benzie, Charlevoix, Cheboygan, Chippewa, Clare, Crawford, Delta, Dickinson, Emmet, Gladwin, Gogebic, Grand Traverse, Houghton, Iosco, Iron, Isabella, Kalkaska, Keweenaw, Lake, Leelanau, Luce, Mackinac, Manistee, Marquette, Mason, Menominee, Missaukee, Montmorency, Newaygo, Oceana, Ogemaw, Ontonagon, Oscoda, Otsego, Presque Isle, Roscommon, Schoolcraft and Wexford Counties

AREA 4: Mecosta and Osceola Counties

LABORERS: LANDSCAPE LABORERS:

AREA 1: Genesee, Lapeer, Livingston, Macomb, Monroe, Oakland, St. Clair, Shiawassee, Washtenaw and Wayne Counties

AREA 2: Remainder of State

LABORERS: OPEN CUT CONSTRUCTION:

Area 1: Macomb, Oakland and Wayne Counties

Area 2: Livingston County (eastern part) and Washtenaw County

Area 3: Monroe, Sanilac and St. Clair Counties

Area 4: Hillsdale, Jackson and Lenawee Counties

Area 5: Clinton, Eaton, Ingham counties; Ionia County (City of Portland), Livingston County (western part)

Area 6: Genesee, Lapeer and Shiawassee Counties

Area 7: Arenac, Bay, Clare, Gladwin, Gratiot, Huron, Isabella, Midland, Ogemaw, Roscommon, Saginaw and Tuscola Counties

Area 8: Allegan, Barry, Berrien, Branch, Calhoun, Cass, Kalamazoo, Lake County (eastern part), Muskegon, Newaygo, Oceana, St. Joseph and Van Buren Counties

Area 9: Ionia County (except the City of Portland), Kent, Mecosta, Montcalm, Osceola, and Ottawa Counties

Area 10: Alcona, Alpena, Antrim, Benzie, Charlevoix, Cheboygan, Crawford, Emmet, Grand Traverse, Iosco, Kalkaska, Lake County (western part), Leelanau, Manistee, Mason, Missaukee, Montmorency, Oscoda, Otsego, Presque Isle, Wexford Counties

Area 11: Entire Upper Peninsula

LABORERS: TUNNEL, SHAFT & CAISSON CONSTRUCTION:

Area 1: Macomb, Oakland and Wayne Counties

Area 2: Genesee, Lapeer & Shiawassee Counties

Area 3: Remainder of State

LINE CONSTRUCTION:

AREA 1: Huron County, Ingham County (Twps. of Leroy, Locke, Wheatfield, White Oak and Williamson), Lapeer County, Lenawee County (Twps. of Clinton and Macon), Livingston County (Except the Twps. of Cohoctah, Deerfield, Tyrone, and Unadilla), Macomb

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County, Monroe County (Except the Twps. of Bedford, Erie, Lasalle, and Whiteford), Oakland County (Except the Twp. of Holly), St. Clair, Sanilac, and Tuscola Counties, Washtenaw County (Except the Twps. of Lyndon, Manchester, Sharon, and Sylvan), and Wayne County
AREA 2: Remainder of State

PAINTERS:

AREA 1: Allegan County (Twps. of Dorr, Fillmore, Heath, Hopkins, Laketown, Leighton, Manlius, Monterrey, Overisel, Salem, Saugatuck and Wayland); Ionia County (Twps. of Berlin, Boston, Campbell, Easton, Ionia, Keene, Odessa, Orange, Orleans, Otisco, Ronald and Sebawa), Kent, Mecosta and Montcalm Counties; Newaygo County (Twps. of Barton, Big Prairie, Brooks, Croton, Ensley, Everett, Goodwell, Grant, Home, Monroe, Norwich and Wilcos); Osceola County (except the twps. of Marriion and the northeastern corners of Highland and Middle Branch); Ottawa County (Twps. of Allendale, Blendone, Chester, Georgetown, Holland, Jamestown, Olive, Park, Polkton, Port Sheldon, Tallmadge, Wright and Zeeland)
AREA 2: Allegan County (Southeast half), Barry County (Southwest half), Cass County (East half), Kalamazoo, St. Joseph Cos., Van Buren Co. (East half)
AREA 3: Benzie, Lake, Manistee and Mason Cos.
AREA 4: Huron Co. (East Half), St. Clair and Sanilac Cos.
AREA 5: Hillsdale, Jackson, Lenewee Counties: Livingston County (east of Howell City Limits, south to Washtenaw County line and north to Genesee County line); Macomb, Monroe, Oakland, Washtenaw and Wayne Counties.
AREA 6: Genesee, Lapeer and Shiawassee Counties
AREA 7: Arenac, Bay, Clare, Gladwin, Gratiot Counties; Huron County (west half); Iosco, Isabella, Midland, Ogemaw Counties; Osceola County (north of Hwy. #10); Roscommon, Saginaw and Tuscola Counties
AREA 8: Clinton County, Ingham County, Ionia County (including the Cities of Lyons, Muir and Portland); Livingston County (including Howell)
AREA 9: Alcona, Alpena, Cheboygan, Emmet, Montmorency, Oscoda and Presque Isle Counties

POWER EQUIPMENT OPERATORS:

AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION:

ZONE 1: Genesee, Macomb, Monroe, Oakland, Washtenaw, and Wayne Counties
ZONE 2: Remainder of State

POWER EQUIPMENT OPERATORS:

UNDERGROUND CONSTRUCTION:

Zone 1: Bay, Branch, Calhoun, Clinton, Eaton, Genesee, Gratiot, Hillsdale, Huron, Ingham, Jackson, Lapeer, Lenawee, Livingston

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Macomb, Midland, Monroe, Oakland, Saginaw, Sanilac, Shiawassee,
St. Clair, Tuscola, Washtenaw, Wayne Counties

Zone 2: Remainder of State

POWER EQUIPMENT OPERATORS:**STEEL ERECTION:**

Zone 1: Lenawee, Macomb, Monroe, Oakland, St. Clair, Washtenaw,
and Wayne Counties

Zone 2: Remainder of State

Zone 3: Alger, Beraga, Chippewa, Delta, Dickinson, Gogebic,
Houghton, Iron, Keweenaw, Luce, Mackinac, Marquette, Menominee,
Ontonagon and Schoolcraft Counties

SIGN INSTALLER:

Zone 1: Genesee, Macomb, Monroe, Oakland, Washtenaw and Wayne
Counties

Zone 2: Remainder of State

*** TRUCK DRIVERS:****AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION:**

Area 1: Genesee, Livingston, Macomb, Monroe, Oakland, Washtenaw,
and Wayne Counties

Area 2: Remainder of State

TRUCK DRIVERS:*UNDERGROUND CONSTRUCTION:**

Area 1: Genesee, Macomb, Monroe, Oakland, St. Clair, Washtenaw
and Wayne Counties

Area 2: Lapeer and Shiawassee Counties

DEFINITION OF GROUPS

LABORERS: AIRPORT, BRIDGE, & HIGHWAY CONSTRUCTION

LABORERS: PAVEMENT WORK

GROUP 1: Pavement Markers

GROUP 2: Cone Setters

LABORERS: AIRPORT, BRIDGE, & HIGHWAY CONSTRUCTION

CLASS A - Line-Form Setter for curb or pavement

CLASS B - Pipe Layer, Oxygen Gun

CLASS B-1 - Asphalt Raker

**CLASS C - Tunnel Miner (highway work only), Finishers Tender, Guard
Rail Builder, Highway and Median Barrier Installer (including sound
barrier and crash barrier), Fence Erector, Bottom, Powder, Wagon
Drill and Air Track Operators, Curb and Side Rail Setters' Tenders,
Diamond and Core Drill.**

**CLASS D - Mixer Operator (less than 5 sacks), Air or Electric tool
operators (jackhammer, etc.), Spreader, Box (asphalt, stone, gravel
etc.) Concrete Paddler, Power Chain Saw Operator, Paving Batch**

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Truck Dumper, Asphalt Screed Checker, Grade Checker and Tunnel Mucker (highway work only), Concrete Saw (under 40 h.p.), and Dry Pack Machine.

CLASS E - Cement Handler or Dock, Top, Asphalt Dust Handler.

CLASS F - Asphalt Shoveler or Loader, Asphalt Plant Misc., Axe, Batch Bin (no power), Burlap, Carpenter's Tender, Subgrade Labor (hand tools), Yard, Guard Rail Builder's Tender, Highway and Median Barrier Installer's Tenders, Fence Erector's Tender, Dumper (wagon, truck, etc.), Jetting Labor Joint Filling Labor, Misc. Unskilled Labor, Powder Monkey (tender), Sprinkler Labor, Form Setting Labor, Pavement Reinforcing, Handling and placing (e.g. wire mesh, steel mats, dowel bars, etc.), Mason's or Bricklayer's Tender on Manholes, Headwalls, etc., water proofing, seal coating and Slurry Mix.

LABORERS: LANDSCAPE LABORERS:

CLASS A: Landscape specialist, including air, gas, diesel, electric tool and/or equipment

CLASS B: Landscape laborer, truck driver, materials haulers, and small power equipment

LABORERS: OPEN CUT CONSTRUCTION

CLASS 1 - Construction Laborers

CLASS 2 - Mortar and Material Mixer, Concrete Form, Signal, Well Point, Manhole, Headwall and Catch Basin Builder, Guard Rail Builder and Fence Erector

CLASS 3 - Air, Gasoline and Electric Tool Operator, Vibrator Operator, Driller Pump, Tar Kettle Operator, Bracers, Rodders. Reinforced Steel or Mesh (e.g. wire mesh, steel mats, dowel bars, etc.), Cement Finisher, Pipe Jacking and Boring, Wagon Drill and Air Track Operator and Concrete Saw Operator (under 40 h.p.), Windlass and Tugger.

CLASS 4 - Trench or Excavating Grade.

CLASS 5 - Pipe Layer (including crock, metal pipe. multi-plate or other conduits).

LABORERS: TUNNNEL, SHAFT & CAISSON CONSTRUCTION

CLASS 1 - Tunnel, Shaft and Caisson Laborer, Dump, Shanty, Hog House Tender, Testing (on gas).

CLASS 2 -Manhole, Headwall, Catch Basin Builder, Bricklayer Tender, Mortar Machine, Material Mixer, Fence Erector and Guard Rail Builder

CLASS 3 - Air Tool Operator (jackhammer, bush hammer & grinding), First bottom, Second Bottom, Cage Tender, Car Pusher, Carrier, Concrete, Concrete Form, Concrete Repair, Cement Invert Laborer, Cement Finisher, Concrete Shoveler, Conveyor, Floor, Gasoline and Electric Tool Operator, Gunnite, Grout Operator, Pump, Outside

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Lock Tender, Scaffold, Top Signal, Switch, Track, Tugger, Vibrator, Winch Operator, Pipe Jacking, Boring, Wagon Drill, Air Track Operator and Concrete Saw Operator, (under 40 h.p.).

CLASS 4 - Tunnel, Shaft and Caisson Mucker, Bracer, Liner Plate, Long Haul Dinky Driver and Well Point.

CLASS 5 - Tunnel, Shaft and Caisson Miner, Drill runner, Key Board Operator, Power Knife Operator, Reinforced Steel or Mesh (e.g. wire mesh steel dowel bars, etc.).

CLASS 6 - Dynamite and Powder.

PAINTERS:

Area 1:

Group 1: Brush

Group 2: Paperhanging - wall coverings; Drywall finishers

Group 3: Swing stage, window jack, and window belts

Group 4: Spray decks

Group 5: Bridges over highways or railroads; Steam cleaning, sandblasting, waterblast; Bridge work over rivers or lakes

Group 6: Spray - pressure roller

Group 7: Steeple jack or high work - 40 feet

POWER EQUIPMENT OPERATORS:

AIRPORT, BRIDGE & HIGHWAY CONSTRUCTION

ZONES 1 & 2:

CLASS 1 - Asphalt Plant Operator, Crane Operator, Dragline, Shovel Operator, Locomotive Operator, Paver (5 bags or more), Elevating Grader Operator, Pile Driving Operator, Roller (asphalt), Blade Grader Operator, Trenching Machine, (ladder or wheel type), Auto-Grader, Slip Form Paver, Self-Propelled or Tractor Drawn Scraper, Conveyor Loader Operator (euclid type), Endloader Operator, (1 yd. capacity or over), Bulldozer, Concrete Pump (3" and over), Swing Boom Truck (up to 12 ton capacity), Hoisting Engineer, Tractor Operator, Finishing Machine, Asphalt Mechanic, Pump Operator (6" discharge or over, gas, diesel powered or generator of 300 amp or over), Shoulder or Gravel Distributing, Machine Operator (self-propelled), Backhoe (with over 3/8 yard bucket), Side Boom Tractor (type D-4 equivalent or larger), Tube Finisher (slip form paving), Gradall (and similar type machines), Asphalt Paver (self-propelled), Asphalt Planer (self-propelled), Batch Plant (Concrete-central mix, transit mix, shrink mix), Slurry Machine (asphalt), Roto Mill.

CLASS 2 - Sweeper (Wayne type & similar equipment), Screening Plant Operator, Washing Plant Operator, Crusher, Backhoe (with 3/8 yard bucket or less), Side Boom Tractor (smaller than D-4 type or equivalent), Batch Plant (concrete-dry mix).

CLASS 3 - Air Compressor Operator (600 cfm or more), Air Compressor (2 or more, less than 600 cfm), Wagon Drill Operator, Concrete Breaker, Tractor Operator (Farm type w/

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attachments).

CLASS 4 - Boiler Firetender, Oiler, Firetender, Mechanic's Tender, Trencher (service Flexplane Operator, Cleftplane Operator, Grader (Self-propelled Fine Grade or Form (concrete)), Finishing Machine (concrete), Boom or Winch Truck Operator, Concrete Pump (under 3"), Mesh Installer (self-propelled), Endloader (under 1 yard capacity), Roller Operator (other than asphalt), Curing Equipment (self-propelled), Concrete Saw Operator (40 h.p. or over), Power Bin Operator, Plant Drier (asphalt), Vibratory Compaction Equipment (6 ft. wide or over), Guard Post Driver (power driven), All Mulching Equipment, Stump Remover, Farm Type Tractor Operator.

POWER EQUIPMENT OPERATORS: UNDERGROUND CONSTRUCTION

UNDERGROUND CONSTRUCTION:

ZONES 1 & 2:

Class I: Backfiller Tamper, Backhoe, Batch Plant Operator (concrete), Clamshell, Concrete Paver (two drum or larger), Conveyor Loader (euclid type), Crane (crawler, truck type or pile driving), Dozer (9 ft. blade and over), Dragline, Elevating Grader, Endloader (over 1 1/2 cubic yds. capacity), Gradall (and similar type equipment), Mechanic, Power Shovel, Roller (asphalt, Scraper (self-propelled or tractor drawn), Side Boom Tractor (type D-4 or equivalent and larger), Slip Form Paver, Slope Paver, Trencher (over 8 ft. digging capacity), Well Drilling Rig

Class II: Boom Truck (power swing type boom), Crusher, Dozer (less than 9 ft. blade), Endloader (1 1/2 cubic yds. capacity and smaller), Hoist, Pump (one or more - 6 in. discharge or larger - gas or diesel powered or powered by generator of 300 amps or more inclusive of generator), Side Boom Tractor (smaller than type D-4 or equivalent), Sweeper (Wayne type and similar equipment), Tractor (pneu-tired, other than backhoe or front end loader), Trencher (8 ft. digging capacity)

Class III: Air Compressors (600 cfm or larger), Air Compressors (two or more - less than 600 cfm), Boom Truck (non-swinging, non-powered type boom), Concrete Breaker (self-propelled or truck mounted - includes compressor), Concrete Paver (one drum 1-1/2 yd. or larger), Elevator (other than passenger), Maintenance Man, Mechanic Tender, Pump (two or more - 4 in. up to 6 in. discharge - gas or diesel powered - excluding submersible pumps, Pumpcrete Machine (and similar equipment), Wagon Drill (multiple), Welding Machine or Generator (two or more 300 amp. or larger/gas or diesel powered)

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Class IV: Boiler, Concrete Saw (40 h.p. or over), Curing Machine (self-propelled), Farm Tractor (with attachment), Finishing Machine (concrete), Firetender, Hydraulic Pipe Pushing Machine, Mulching Equipment, Oiler, Pumps (two or more up to 4 in. discharge if used three hours or more a day - gas or diesel powered excluding submersible pumps), Roller (other than asphalt), Stump Remover, Trencher (service), Vibrating Compaction Equipment (self-propelled, 6 ft. wide or over)

POWER EQUIPMENT OPERATORS:

STEEL ERECTION

ZONE 1:

- Group 1: Crane operator when operating combination of boom and jib 220' or longer
- Group 2: Crane operator when operating combination of boom and jib 220' or longer on a Crane that requires an Oiler
- Group 3: Crane operator when operating combination of boom and jib 140' or longer
- Group 4: Crane operator when operating combination of boom and jib 140' or longer on a Crane that requires an Oiler
- Group 5: Tower Crane and derrick operator (where operator's work station is 50 ft. or more above first sub-level)
- Group 6: Tower Crane and derrick operator (where operator's work station is 50 ft. or more above the first sub-level) on a crane that requires an Oiler
- Group 7: Crane operator when operating combination of boom and jib 120' or longer
- Group 8: Crane operator when operating combination of boom and jib 120' or longer on a Crane that requires an Oiler
- Group 9: Crane operator and job mechanic
- Group 10: Crane operator on a crane that requires an Oiler.
- Group 11: Hoisting operator
- Group 12: Compressor and/or welder operator
- Group 13: Oiler or firetender

ZONE 2:

- CLASS A - Crane Operator with main Boom & Jib 220' or longer
- CLASS B - Crane Operator with main Boom & Jib 140' or longer, Tower Cranes, Gantry Cranes, Whirley Derrick.
- CLASS C - Regular Equipment Operator, Crane, Dozer, Loader, Hoist, Straddle Wagon, Job Mechanic.
- CLASS D - Air Tugger (single drum), Material Hoist, Pump (6" or over).
- CLASS E - Air Compressor, Welder, Generators, Conveyors.
- CLASS F - Oiler and Firetender.

SIGN INSTALLERS:

Zone 1 & 2:

- CLASS A - Performs all necessary labor

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uses all tools required to construct & set concrete forms required in the installation of highway & street signs
CLASS B - Performs all miscellaneous labor, uses all hand and power tools, & operates all other equipment, mobile or otherwise, required for the installation of highway & street signs

*TRUCK DRIVERS:

UNDERGROUND CONSTRUCTION:

Areas 1 & 2:

- Group 1 - Truck Drivers on all trucks (EXCEPT dump trucks of 8 cubic yards capacity or over, pole trailers, semis, low boys, Euclid, double bottom or fuel trucks.)
- Group 2 - Truck Drivers of Dump Trucks of 8 cubic yards capacity or over, Pole Trailers, Semis & Fuel Trucks.
- Group 3 - Truck Drivers on Low Boys, Euclid & Double Bottoms

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29 CFR, 5.5(a)(1)(ii)).

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**SPECIFICATIONS FOR
CONSTRUCTION OF FIELD SUPPORT AREA
ALBION-SHERIDAN TOWNSHIP LANDFILL
ALBION, MICHIGAN**

Prepared for

**U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION V
CHICAGO, ILLINOIS**

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JUNE 1992

04011.02

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SPECIAL NOTE

With regard to the parties identified in these Specifications for Construction of Field Support Area, ENGINEER and OWNER as identified herein are also identified as PRIME CONTRACTOR throughout the remaining Bid Document Package and CONTRACTOR as identified herein is also identified as SUBCONTRACTOR throughout the remaining Bid Document Package.

SECTION 01010**SUMMARY OF WORK****PART 1 - GENERAL****1.01 SITE LOCATION AND DESCRIPTION:**

- A. The Albion-Sheridan Township Landfill site (the "site") is a former landfill located approximately 1 mile east of Albion, Michigan in Section 36 (T2S, R4W) of Calhoun County (see Sheet 1). The site is defined as Lot 27 and Lot 28 of the Supervisor's Plat. The site is comprised of approximately 30 acres of land. It is bordered on the north by Michigan Avenue (also known as State Route 99), on the east by the Calhoun/Jackson County line, and on the south by East Erie Road. The western boundary of the site is approximately 660 feet west of the Calhoun/Jackson County line.

1.02 CONTRACT DOCUMENTS:

- A. The specifications and drawings included in these contract documents establish the performance and quality standards for materials, equipment, and quality of workmanship. Any questions on interpretation of, or any conflicts with, any portion of these Specifications shall be directed to and resolved by the PRIME CONTRACTOR.
- B. Specific tasks not mentioned or completely detailed in these Specifications, that are necessary or normally required as a part of the work described, or that are necessary or required to make each installation satisfactory or legally operable, shall be performed by the SUBCONTRACTOR as incidental work without extra cost to the PRIME CONTRACTOR, as if fully detailed in these Specifications. The expense of such work shall be included in the applicable lump sum or unit prices for the work described.

1.03 ACCESS AND PERMITS:

- A. The U.S. EPA Region V has the responsibility to provide legal access to the construction area. The SUBCONTRACTOR has the responsibility to provide physical access to the construction area.
- B. Where portions of the Work will be located on public or private property, easements will be obtained by the U.S. EPA or PRIME CONTRACTOR. The SUBCONTRACTOR shall confine construction operations to within the limits of the easements, if any.

It is anticipated that all required easements and access permits will be obtained prior to the initiation of the work. However, if the procurement of any easement or permit is delayed, the SUBCONTRACTOR shall schedule its Work in such a way that operations are confined to areas where easements or

SECTION 01010SUMMARY OF WORK

permits have been obtained or are not required, until such a time as the easement or permit has been secured.

- C. The SUBCONTRACTOR shall provide all permits and licenses required by federal, state or local agencies for execution of the work.

1.04 PERSONAL PROTECTIVE EQUIPMENT AND SAFETY TRAINING:

- A. The PRIME CONTRACTOR will provide the SUBCONTRACTOR with a copy of the Site Health and Safety Plan (provided under separate cover). SUBCONTRACTORS shall comply with the Site Health and Safety Plan as required by the PRIME CONTRACTOR. The PRIME CONTRACTOR may issue a stop work order to the SUBCONTRACTOR for failure of its employees to comply with the Site Health and Safety Plan. The SUBCONTRACTOR will not be paid for the time occurring after notice of a stop work order and before resumption of Work.
- B. All SUBCONTRACTOR personnel who enter hazardous sites will be required, at a minimum, to have passed an entry physical examination that meets the OSHA requirements for respirator use (29 CFR 1910.134). The SUBCONTRACTOR agrees to submit to the PRIME CONTRACTOR a certification for each employee assigned to hazardous waste site field activities that said employee has been medically certified by a physician for this Work, including the use of a respirator in accordance with the provisions of 29 CFR 1910.134. Certifications of employee medical status must be submitted to the PRIME CONTRACTOR before an employee shall be permitted to work at a hazardous waste site under the Subcontract Documents.
- C. All Subcontract personnel engaged in on-site construction work must provide certification of completion of either 24 or 40 hour OSHA Health and Safety Training Course in accordance with 29 CFR 1910.120. Training shall include, but not be limited to, use of personal protective equipment (including respirators), decontamination, hazard recognition, safe operating procedures, and emergency response.

1.05 MATERIALS AND WORKMANSHIP:

- A. The SUBCONTRACTOR shall, except as specifically stated in the Subcontract Documents, provide all labor, materials, equipment, tools, and other facilities and services necessary for proper completion of all Work under the Subcontract Documents.
- B. The SUBCONTRACTOR shall guarantee that all Work will be performed in a workmanlike manner and will conform with these Specifications.

SECTION 01010**SUMMARY OF WORK****1.06 CONFIDENTIALITY AND PUBLICITY:**

- A. All inquiries by individuals or news media shall be politely referred to the PRIME CONTRACTOR.

1.07 SCHEDULE OF WORK:

- A. The grading, surface course, decontamination pad, electrical installation, and field support area perimeter fencing shall be completed within twenty-one (21) days of notification to proceed. The entire site fencing shall be completed within forty-five (45) days of notice to proceed.

1.08 SCOPE OF WORK:

- A. The site shall be cleared and grubbed as stated herein.
- B. The site shall be cut, filled and graded as stated herein.
- C. A concrete decontamination pad with sump shall be constructed as stated herein.
- D. A fence shall be constructed around the perimeter of the entire site and around the perimeter of the field support area, as stated herein. Perimeter fencing shall include up to 4 2-leaf swing gates in locations to be designated by the PRIME CONTRACTOR. Chain-link fencing exists along the southern site boundary and a portion of the western site boundary. It will be the responsibility of the SUBCONTRACTOR to verify field conditions.
- E. Temporary electric and telephone utilities will be installed as described herein. These utilities will remain intact after completion of construction activities.

SECTION 02200EARTHWORKPART 1 - GENERAL

1.01 DESCRIPTION:

- A. The work includes all earthwork for the concrete decontamination pad, rough site grading, and placement of aggregate surface course at the field support area.

1.02 REFERENCES:

- A. MDOT - Michigan Department of Transportation, "Standard Specifications for Construction", 1990 ed.
- B. ASTM D1557 - American Society of Testing Materials, moisture-density of soils relations (Modified Proctor).

1.03 JOB CONDITIONS:

If during progress of the work, density tests indicate that compacted materials do not meet specified requirements, remove defective work and replace at no cost to the PRIME CONTRACTOR.

PART 2 - PRODUCTS

2.01 MATERIALS:

A. Fill:

1. Granular Material: MDOT 8.02.06, Class II limited to one-inch maximum size.
2. Suitable Excavated Material: Free of cinders, ashes, refuse, sod, boulders, rocks, pavement, soft or plastic clays, and vegetable or other objectionable organic material and capable of being compacted as specified herein.
3. Aggregate Surface Course: Aggregate 23A per MDOT 3.08.02 and 8.02.04.

SECTION 02200EARTHWORKPART 3 - EXECUTION**3.01 PREPARATION:****A. Clearing and Grubbing:**

1. Remove trees and shrubs not indicated to be preserved from field support area as required to complete work. Grub out all roots to a depth of 2 feet below finished grade.
2. Stockpile all debris resulting from clearing and grubbing on site in an area to be designated by the PRIME CONTRACTOR.

B. Topsoil: Remove from field support area and stockpile on site in designated areas.**3.02 UTILITIES:**

- A. Before starting excavation establish location and extent of underground utilities occurring in work area.
- B. Notify utility companies to remove and relocate lines which are in way of excavation.
- C. Maintain, reroute or extend as required, existing utility lines to remain which pass through work area.
- D. Protect utility services uncovered by excavation.
- E. Cap off, plug or seal, discontinued utility services and remove from site within excavated areas.

3.03 EXCAVATION:

- A. Excavate as required for construction of the work.
- B. Remove unsuitable material to firm underlying soils beneath footings, floor slabs, paved areas and walks.
- C. Preparation of Subgrade:
 1. Compact top 12 inches of subgrade under footings, slabs, paved areas and walks to 95% density.
 2. Compact top 12 inches under landscaped areas to 85% density.

SECTION 02200EARTHWORK

3. Protect excavation by shoring, bracing, sheet piling or other methods as required.

3.04 FILL:

- A. Under Slab and Sump: Granular material place in layers maximum 9-inch deep compacted to 95% density.
- B. Under Surfaced Area: Suitable excavated material or granular material in layers maximum 9-inch deep compacted to 95% density.
- C. Landscaped Areas: Suitable excavated material or granular material in layers maximum 12-inch deep compacted to 85% density. See site plan for minimum depths.

3.05 ROUGH GRADING:

- A. Rough grade to provide flat level surface in field support area such that installation of aggregate surface course will restore area to original elevation.

3.06 DEWATERING:

- A. Provide dry excavations until structures have been placed and fill is complete.
- B. Direct surface drainage away from excavated areas.

3.07 AGGREGATE SURFACE COURSE:

- A. Install aggregate surface course over area illustrated in drawings. Aggregate surface course thickness shall be eight (8) inches.

3.08 SURPLUS MATERIALS:

- A. Surplus excavated or unsuitable material shall be stored on site in an area designated by the PRIME CONTRACTOR.
- B. All trees, roots, rocks, and debris generated during clearing and grubbing activities shall be stockpiled on the site in an area to be designated by the PRIME CONTRACTOR. No burning of wood debris will be permitted on site.

SECTION 02444CHAIN-LINK FENCEPART 1 - GENERAL

1.01 DESCRIPTION:

A. Work Included:

This work shall consist of furnishing and erecting chain-link fence as specified at the locations shown on the plans or as directed by the PRIME CONTRACTOR.

PART 2 - MATERIALS

2.01 GENERAL:

A. Fencing shall be constructed from SS20 fence material.

B. Assume 5,000 linear feet of fence.

C. Assume four 2-leaf swing gates.

2.02 PRODUCTS:

A. Fence Materials:

Posts shall be 2-inch O.D., except that terminal posts shall be 2 1/2-inch O.D., and gate posts shall be 3-inch O.D.

Finished fencing will include posts, fabric, stretcher bars, top and bottom rails, and all incidental hardware and fittings. Two-strand barbed wire shall be installed on fence tops to match existing fence segments.

B. Fencing gates shall consist of 2-leaf swing gates at seven feet each (fourteen foot opening). Gate posts shall be set in concrete.

C. Concrete:

Provide concrete consisting of Portland Cement, ASTM C150, aggregates ASTM C33, and clean water. Mix materials to obtain concrete with a minimum 28-day compressive strength of 2,500 psi using at least 4 sacks of cement per cubic yard, 1-inch maximum size aggregate, maximum 3-inch slump, and 2% to 4% ENTRAINED AIR.

SECTION 02444**CHAIN-LINK FENCE****PART 3 - EXECUTION****3.01 FIELD INSTALLATION:****A. Fence Posts:**

Fence posts shall be set by driving (no concrete) except that gate posts shall be set in concrete. Drive depth shall be a minimum of 42-inches and shall be sufficient to insure that completed fence exhibits structural strength commensurate with field conditions.

B. Height and Style:

Completed fence shall match existing fence segments in height and style. Available information indicates the existing fence is seven (7) feet in height measured from ground surface to the top rail. HOWEVER, it is the responsibility of the SUBCONTRACTOR to field verify existing conditions.

SECTION 03253WATERSTOPSPART 1 - GENERAL

1.01 DESCRIPTION:

- A. The work includes waterstops where indicated.

1.02 SUBMITTALS:

- A. Product data describing the waterstops, including dimensions, physical properties of the material, and installation instructions.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. PVC Waterstops:
1. Waterstops shall be 6 inch x 3/16 inch minimum, strip type, polyvinyl chloride (PVC) with ribs or end bulbs, unless otherwise indicated.
 2. PVC material to be dense, homogeneous, and free from porosity or other imperfections, to be resistant to portland cement, alkalis, mildews, fungi, and mild (10%) acid solutions, and to meet or exceed:

Tensile strength (psi, minimum)	2,000
Elongation, ultimate (percent, minimum)	250
Water absorption (percent by weight)	5
Compression set (percent, maximum)	30
Durometer hardness (shore A)	65-75
Tensile strength after accelerated drying (48 hour, 70 deg C, 300 psi) (percent, minimum)	80

PART 3 - EXECUTION

3.01 INSTALLATION:

A. General:

1. Waterstops shall be fully continuous for the extent of the joint. Splices shall be accomplished in accordance with the manufacturer's instructions.
2. Prefabricate multiple joint splices, joints with an angle cut, alignment change, or the joining of dissimilar sections prior to placement.

SECTION 03253**WATERSTOPS**

3. Adequately support waterstops during installation and concrete pours. Holes in the waterstops material are prohibited.
4. Repair or replace damaged waterstops prior to concrete pours. Seal concrete joints if leaks occur.
5. If not indicated, provide waterstops at all construction joints that constitute an air-liquid interface and extend to 2 feet below grade, where applicable.

B. PVC Waterstops:

1. Limit PVC waterstop exposure to direct sunlight to two days.

SECTION 03300**CAST-IN-PLACE CONCRETE****PART 1 - GENERAL****1.01 DESCRIPTION:**

- A. The work includes all cast-in-place concrete.

1.02 SUBMITTALS:

- A. Proposed mix design prepared by an approved independent testing firm for each class of concrete. Select proportions according to ACI 301-72, Section 3.8, Method 1 or Method 2. Approval of mix is required prior to placement of concrete.
- B. Shop drawings showing fabrication dimensions and locations for placing the reinforcing steel and accessories. Details of reinforcement and accessories shall be in accordance with ACI 315.
- C. Certifications for the following:
 - 1. Cement.
 - 2. Aggregates.
 - 3. Admixtures.
 - 4. Reinforcement.

1.03 REFERENCES:

- A. ACI 318, Building Code Requirements for Reinforced Concrete.
- B. ACI 301, Specifications for Structural Concrete for Buildings.

PART 2 - PRODUCTS**2.01 MATERIALS:**

- A. Concrete:
 - 1. Cement: ASTM C150 or ASTM C595 (maximum fly ash content shall be 20% by weight). All cement used in exposed concrete shall be of the same brand from the same mill.
 - 2. Coarse aggregates: MDOT 6AA.

SECTION 03300CAST-IN-PLACE CONCRETE

3. Fine aggregate: MDOT 2N5
 4. Mixing water: Clean, fresh, and potable.
 5. Admixtures:
 - a. Air-entraining: ASTM C260.
 - b. Water-reducing, retarding, and accelerating: ASTM C494. Calcium chloride will not be permitted as an admixture.
 - c. Pozzolan admixtures: ASTM C618, Type F, loss on ignition limited to 4%.
- B. Reinforcement:
1. Bars: Deformed, ASTM A615 (SI), Grade 60.
 2. Welded wire fabric: ASTM A185.
- C. Accessories:
1. Tie wire: 16 gauge annealed.
 2. Chairs, bar supports, bolsters, spacers: CRSI, Class C for structural slabs, Class A, for slabs-on-grade.
 3. Form ties: Commercially manufactured, water seal form ties with minimum 1-inch diameter steel or neoprene collar at mid-point for walls subject to hydrostatic pressure.
- D. Joint Sealant: Semi-rigid, non-tracking type: Tremco "Dymeric", or equal.

2.02 PROPORTIONING CONCRETE:

- A. Proportions and Materials:
- Permissible Cement Types: I, IP, I-A, IP-A
- Minimum Cement Content: 5.5 sacks/cu.yd. for 3500 psi, 6.0 sacks/cu.yd. for 4000 psi.
- Coarse Aggregate: MDOT 6A
- Sand: MDOT-2NS
- Maximum Water-Cement Ratio: 5.0 gal./sack
- Entrained Air Content: 5-8%
- Maximum Slump: 3-1/2"
- Minimum Compressive Strength: i.e. f_c' (28 day) 4000 psi floors and slabs on grade, all other 3500 psi.

SECTION 03300CAST-IN-PLACE CONCRETE

- B. Admixtures: Approval of PRIME CONTRACTOR required. Use in accordance with the manufacturer's instructions.
- C. If the SUBCONTRACTOR intends to place concrete by pumping, the mix design shall be prepared in accordance with these specifications and the recommendations of ACI 304.

2.03 FABRICATING REINFORCEMENT:

- A. Fabricate in accordance with approved shop drawings and ACI 315.
- B. Reinforcing splices: Class B unless otherwise shown.

PART 3 - EXECUTION**3.01 PERFORMANCE:**

In accordance with the requirements of ACI 301, Chapters 4 thru 13, 17 and 18.

SECTION 05531STEEL GRATINGPART 1 - GENERAL

1.01 DESCRIPTION:

- A. The work includes all steel grating, including accessories.

1.02 SUBMITTALS:

- A. Submit shop drawings showing all locations and fabrication dimensions; type, detail, and location of anchorages; and location and detail of all openings greater than 4 inches in any direction.
- B. Submit material certifications and product data, if requested.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Steel shall conform to ASTM A425 or ASTM A569.

2.02 FABRICATION:

- A. Field verify all dimensions prior to fabrication.
- B. Bearing bar size shall be as noted on the drawing.
- C. All grating shall be banded.
- D. All grating shall be hot-dip galvanized in accordance with ASTM A123.

PART 3 - EXECUTION

3.01 INSPECTION:

- A. Check supporting members for correct layout and alignment.
- B. Verify that surfaces to receive metal grating are free of debris.
- C. Do not proceed with installation until defects are corrected.

3.02 INSTALLATION:

- A. Install metal grating units and accessories in accordance with manufacturer's recommendations and approved shop drawings.

SECTION 05531STEEL GRATING

- B. Touch-Up Painting:
 - 1. Touch-up galvanized surfaces with galvanized repair paint applied in accordance with manufacturer's instructions.
- C. Do not use grating units for storage or working platforms until permanently secured in position.
- D. Assure that construction loads do not exceed carrying capacity of grating.

SECTION 16010ELECTRICAL GENERAL PROVISIONSPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. General provisions for electrical work.

1.02 STANDARDS:

- A. Applicable Standards and Codes:

1. Institute of Electrical and Electronic Engineers (IEEE).
2. Underwriters Laboratories, Inc. (UL).
3. National Electrical Manufacturers Association (NEMA).
4. National Electrical Code (NEC).
5. American Society for Testing and Materials (ASTM).
6. American National Standards Institute (ANSI).
7. National Board of Fire Underwriters (NBFU).
8. National Fire Protection Association (NFPA).
9. National Electrical Contractors "Standard of Installation" (NECA)
10. Joint Industrial Council (JIC).
11. Code of Federal Regulations (CFR). Title 29 Labor, Subpart S-Electrical.

- B. Where quantities, sizes, or other requirements shown on the drawings or specified herein exceed the requirements of the above standards and codes, the drawings and specifications shall govern.

1.03 SUBMITTALS:

- A. Prepare and maintain record drawings current with work completed. Submit to PRIME CONTRACTOR on completion of project.
- B. Provide records of insulation test (megohm check) on buried conductors directly buried.

SECTION 16010**ELECTRICAL GENERAL PROVISIONS**

- C. After award of the contract and prior to starting any work the SUBCONTRACTOR shall submit to the PRIME CONTRACTOR:
 - 1. Work schedule detailing dates of principle events and completion date.

1.04 CLEARANCES:

- A. Equipment:
 - 1. Maintain clearances from electric panels, and other electrical installations as required by NEC and CFR.
 - 2. Maintain working clearances around electrical equipment as required for proper maintenance and operation.

1.05 IDENTIFICATIONS:

- A. Provide identification signs on all equipment, switches, breakers, and panels.
- B. Provide a type written circuit identification schedule in distribution or load center under glass or plastic. Each circuit to be identified by load.

1.06 CODES AND STANDARDS:

- A. These specifications are minimum requirements and shall govern except where made more stringent by other sections of this specification or local, state, or federal laws or regulations. In the event of conflict between these specifications and applicable codes and regulations, the codes and regulations shall govern.

1.07 SERVICE APPLICATIONS:

- A. The SUBCONTRACTOR is responsible to make application for electrical service. The cost of this service will be included in Bid amount.
- B. Arrange for any temporary electric service or other means of obtaining temporary power. The cost of obtaining and the use of such power will be paid for by the SUBCONTRACTOR.

1.08 PERMITS, INSPECTIONS AND UTILITY CONNECTIONS:

- A. Obtain all necessary permits and pay all fees in connection with all permits, inspections, and approval by the proper authorities in local jurisdiction of such work. Obtain certificate of satisfactory inspection prior to having electric utility install wattourmeter. Utility company installation and premium charges in all forms are to be paid by the SUBCONTRACTOR. The SUBCONTRACTOR shall ascertain these charges prior to bidding.

SECTION 16010ELECTRICAL GENERAL PROVISIONSPART 2 - PRODUCTS

2.01 MATERIALS:

- A. All electrical equipment and material shall be furnished new and shall be accepted, or certified, or listed or labeled or otherwise determined to be safe by a nationally recognized testing laboratory (NPTL) which in this case is Underwriters Laboratory Inc. (UL).
 - 1. Equipment shall be accepted, certified, listed or labeled by Underwriters Laboratory, Inc. (UL).
 - 2. Equipment or material accepted certified, listed or labeled by an accepted NPTL shall be used in preference to equipment or material that does not have that acceptance.
- B. Substitutions for materials and equipment listed herein must be of equal standards, quality and desired operation, or superior. There will be no approval or consideration for approval of equipment or material submittals for substitution prior to Award of the Contract.
- C. All packaged equipment shall be completely factory wired prior to delivery to the job site. Connection to and bonding of this equipment is required under this section of the specifications.
 - 1. Check all prewired controls before energizing to verify that all internal wiring is properly coordinated to the voltage to be applied.

2.02 SHOP/FACTORY/FINISHING:

- A. Provide baked enamel finishes on exposed surfaces.
- B. Provide galvanized finishes for damp or wet locations.
- C. Touch up or refinish damaged paint.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Provide and install all equipment as specified, required or implied in this specification except as noted. This requirement shall include all labor, materials, and incidentals in a manner consistent with good practice necessary to a complete operable installation.

SECTION 16010ELECTRICAL GENERAL PROVISIONS

- B. Cooperation with other trades shall be implemented by the SUBCONTRACTOR and to be carried on simultaneously or sequentially with the electrical work. This requirement is to facilitate construction to proceed with no harm to the PRIME CONTRACTOR due to the absence of cooperation. All other drawings and sections of the specifications shall become part of the electrical specifications as they relate to electrical work.
- C. Verify equipment dimensions to insure dimensional compatibility.
- D. All excavation, backfilling, and concrete work shall conform to the applicable sections of these specifications.

SECTION 16111CONDUITPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Electrical conduit systems.

1.02 RELATED SECTION:

- A. SECTION 16131 - Junction, Pull and Outlet Boxes.

PART 2 - PRODUCTS

2.01 CONDUIT:

- A. Provide electrical metal tubing (EMT), galvanized, conforming to UL 797 and ANSI C80.3.

2.02 COUPLINGS AND CONNECTORS:

- A. For electrical metal tubing, provide couplings and connectors to be compression gland, liquid tight type.

2.03 FITTINGS:

- A. UL listed.
- B. For metallic conduit, liquid tight, malleable iron or in on alloy aluminum alloy body and cover and stainless steel screws.

2.04 CLAMPS & HANGERS:

- A. Hot dipped galvanized malleable iron straps with back spacers, and hot dipped galvanized strap hangers with zinc plated threaded rods and hardware.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Install the conduit in accordance with the manufacturer's recommendations. In no event shall the conduit size be less than required by National Electric Code for the wire size and number indicated.
- B. Use electrical metal tubing (EMT) for all exposed conduit installations.

SECTION 16111**CONDUIT**

- C. Run conduit vertical or horizontal, except when in concrete slab or run under base slab.
- D. Bends shall be standard ells with a maximum equivalent of four quarter bends in any run between pulling joints.
- E. Fasten all conduits entering boxes with locknut and bushing in the inside and locknut on the outside. Conduit should enter through only bottom of boxes unless otherwise specified.
- F. Clean all conduit thoroughly inside and outside after installation and just before pulling cables. All conduits not terminated in metal fittings or metal cabinets and secured with locknuts shall be terminated with grounding bushings.
- G. Install only undamaged conduit. Plug ends to prevent entry of dirt and moisture.

SECTION 16120WIRES AND CABLESPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Wire and cable for all applications.

PART 2 - PRODUCTS

2.01 LOW VOLTAGE, LIGHTING AND POWER CONDUCTORS:

- A. Conductors provided on 120/240 volt power and lighting systems to be stranded per ASTM B-8 soft drawn copper.
- B. Insulation system shall be type THWN rated 600V as defined and listed in Article 310 of NEC.
- C. Minimum size conductor utilized shall be #14 AWG for control circuits and #12 AWG for power and lighting circuits.
- D. Color code conductor insulation as follows:

Line Voltage	- Black
Grounding Conductor	- Green
Neutral	- White
Control	- Red
DC Circuits	- Blue
Voltage from External Source	- Yellow

Color shall be integral with the insulation compound applied by cable manufacturer.

2.02 DIRECT BURIAL LOW VOLTAGE, LIGHTING AND POWER CONDUCTORS:

- A. Electrical cable used for underground direct burial use shall have copper conductors and be Type UF or USE as defined and listed in Article (339 Type UF) (338 Type USE) of NEC.

PART 3 - EXECUTION

3.01 LOW VOLTAGE LIGHTING AND POWER CABLES:

- A. Install only after completion of work which might cause damage to wires or conduit.
- B. Clean out or replace conduit in which dirt, water, concrete, or other foreign matter has been allowed to accumulate, before installing wiring.

SECTION 16120**WIRES AND CABLES**

- C. Identify each end of each conductor by wire marking tape or sleeve. Mark on outer cover giving voltage, type, size and circuit number.
- D. Splices:
 - 1. No wire splices allowed in entire length of conduit or raceway.
 - 2. Make splices in electrical enclosures.
 - 3. Splice insulation: Equal to original factory insulation. Water proof where below grade.
- E. Termination of conductors:
 - 1. At distribution equipment containing aluminum bus bars; use aluminum/copper lugs rated and approved for the application.
- F. Provide separate conduit for each type of circuit (power, controls, and communications).
- G. Conductors terminating at outlets shall be left not less than 8 inches long within outlet box.

3.02 DIRECT BURIED LOW VOLTAGE LIGHTING AND POWER CABLES:

- A. Install only after completion of work which might cause damage to wires.
- B. Cable splices:
 - 1. None allowed for circuit specified.
- C. Install at minimum depth of 24 inches:
 - 1. Cover with with red polyethylene marker tape continuously marked "Caution: Buried Electrical Cable" located 12" above cable.
 - 2. Encase all direct buried cable in 6 inches of sand.
- D. At termination points mark on outer cover given voltage, type, size:
 - 1. In addition, identify each end of each conductor by wire marking tape or sleeve.
 - 2. Use insulated type compression type lugs.
- E. Provide results of Insulation Tests before line is energized.

SECTION 16131JUNCTION, PULL AND OUTLET BOXESPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Junction boxes, pull boxes, and outlet boxes.

1.02 RELATED SECTIONS:

- A. SECTION 16111 - Conduit.
- B. SECTION 16140 - Wiring Devices.

PART 2 - PRODUCTS

2.01 JUNCTION, PULL, AND OUTLET BOXES:

- A. All boxes used outdoors shall have malleable iron body and cover with stainless steel screws. The finish shall be zinc electroplate and aluminum polymer enamel.
- B. All boxes shall be UL listed and conforming to area classification. Boxes shall be NEMA 4.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Clean interior of boxes of moisture, dirt, metal filings or other foreign matter.
- B. Assure that all conduit fittings that enter the box are tight and secure.

SECTION 16140WIRING DEVICESPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Wiring devices.

1.02 RELATED SECTIONS:

- A. SECTION 16131 - Outlet Boxes.

PART 2 - PRODUCTS

2.01 RECEPTACLES:

- A. Provide one (1) standard duplex receptacle as specification grade, full gang size, polarized, duplex, parallel blade, rated at 15 amperes, 120 volts, conform to NEMA 5-15R and Federal Specification WC596. Receptacle shall be Hubbell 5262 or equal by Leviton or GE.
- B. Provide one (1) standard duplex receptacle as specification grade, full gang size polarized, duplex, parallel blades, grounding type, rated at 20 ampere, 120V conforming to NEMA 5 - 20R. Receptacle shall be Hubbell 5362 or equal by Leviton or GE.
- C. Provide one (1) single receptacle as specification grade locking type with ground rated 30 ampere 120 volt conforming to NEMA L5-30R receptacle shall be Hubbell 2610A or equal by Leviton or GE.
- D. Provide one (1) male plug for 30A locking type receptacle. Plug shall be Hubbell 2611 or equal by Leviton or GE. Deliver to the PRIME CONTRACTOR. Obtain signed receipt and mail to Mr. M. Lawson at WW Engineering & Science.
- E. Provide weatherproof receptacles with spring door type covers.
- F. Nameplates: Provide engraved plastic for receptacles indicating voltage, phase and amperes.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Mount receptacles on service entrance panel not less than 48" above grade.
- B. Provide wiring on the plywood panel in conduit.

SECTION 16160MAIN SWITCHBOARD AND PANELBOARDSPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Main load center.

PART 2 - PRODUCTS

2.01 LOAD CENTER:

- A. Provide UL listed as approved for service entrance, dead front with door load center box and front with corrosion resisting phosphate treatment. Load center enclosure shall be NEMA 3R.
- B. Load center shall be plug-on type construction. All current carrying parts of the bus assembly shall be plated. The bus assembly shall be enclosed in a steel cabinet. A ground kit shall be provided for load center.
- C. Branch circuit breakers shall be molded case circuit breakers, plug-on type, toggle action, quick-make, quick-break, with trip free position separate from either ON or OFF positions. All multipole breakers shall be single operating handle, common trip type. Circuit breakers short circuit ratings shall be 10,000 AIC. Circuit breakers shall be UL listed.
- D. Mains current and voltage rating, type of installation, number and rating of branch circuit breakers are as follows:
 200A Main circuit breaker at 120/240V 1 Ø 3W:
 Branches
 1 - 100 A 2P trailer service
 1 - 15A GFI/1P 15A receptacle
 1 - 20A GFI/1P 20A receptacle
 1 - 15A 1P 15A site light
 1 - 30A GFI/1P 30A receptacle
- E. Ground fault interrupting type circuit breaker shall be provided on circuits where receptacles are outdoors or in wet locations.
- F. Load center design based on Cutler Hammer CH20JIM200R. Equal equipment by Square D, Westinghouse, G.E., or ITE acceptable.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Install load center on a outdoor plywood panel adjacent service entrance metering pole. Support panel on 4" x 4" treated lumber posts.

SECTION 16160MAIN SWITCHBOARD AND PANELBOARDS

- B. Ground the load center to the ground system required in National Electrical Code.
- C. All wiring terminations to be marked as to wire number or circuit number.
- D. Prepare and affix typewritten directory to inside cover of load center indicating loads controlled by each circuit.
- E. Load centers to be mounted on square with vertical and horizontal lines.
- F. Provide connection from 100A breaker in load center to construction trailer on site. Use #2 type USE cable. Provide three (3) USE conductors and a #6 bare copper grounding electrode conductor. Provide protection for cable on vertical runs above grade, and keep spacing of USE and ground conductors at a minimum.

SECTION 16421**LIGHTNING ARRESTERS****PART 1 - GENERAL****1.01 DESCRIPTION:**

- A. The work includes lightning arresters for power service protection.

PART 2 - PRODUCTS**2.01 MATERIALS:**

- A. Provide Low Voltage Lightning and AC Surge Arrester:
1. 120/240V single phase rated.
 2. Rated for service entrance.
 3. Listed and labeled by U.L.
 4. Have conduit connection for attaching to load center enclosure.
 5. Manufacturers: General Electric, Square D, Westinghouse, or equal.

PART 3 - EXECUTION**3.01 INSTALLATION:**

- A. Lightning arresters shall be installed in accordance with applicable codes and IEEE standards.

SECTION 16430METERINGPART 1 - GENERAL

1.01 DESCRIPTION:

- A. The work includes the installation of metering.

1.02 SPECIAL CONDITIONS:

- A. Service metering shall be arranged for by the SUBCONTRACTOR on behalf of the PRIME CONTRACTOR. Payment shall be made by the SUBCONTRACTOR.

PART 2 - PRODUCTS

2.01 MATERIALS:

- A. Main service metering shall be furnished by the electric utility company. Meter socket to be installed by SUBCONTRACTOR.
- B. Provide wood pole for service entrance weather head and meter. Weatherhead to be at least 20 feet above grade.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Service metering shall be installed in accordance with electric utility company's standards.
- B. Weatherhead installation and service entrance conductor shall be in conduit and be in accordance with the National Electrical Code.

SECTION 16450GROUNDINGPART 1 - GENERAL

1.01 SECTION INCLUDES:

- A. Equipment for an effective grounding system.

1.02 STANDARDS:

- A. IEEE Standard 142-1982
- B. N.E.C. Article 250.

PART 2 - PRODUCTS

2.01 GROUNDING ELECTRODE:

- A. Grounding electrode to be ground rods.
- B. Ground rods shall be bonded copper type, steel core with thick copper covering inseperable bonded together 1" X 40 ft length. Ground rod couplings are to be used if rod length of greater than 10 feet is required.

2.02 GROUNDING CONNECTIONS:

- A. To be thermoweld when concealed.
- B. To be mechanical where exposed to view.
- C. Where the grounding conductor penetrates a concrete surface use a 5/8 inch solid copperweld rod or a thermoweld antisiphon water stop.

2.03 GROUNDING ELECTRODE CONDUCTOR:

- A. Grounding electrode conductor shall be sized in accordance with Table 250-94 of N.E.C. and shall be copper

2.04 EQUIPMENT GROUNDING CONDUCTORS:

- A. Equipment grounding conductors shall be copper sized in accordance with Table 250-95 of NEC.

PART 3 - EXECUTION

3.01 INSTALLATION:

- A. Provide ground resistance tests of ground rod shall be made and results signed as correct by the SUBCONTRACTOR.

SECTION 16450GROUNDING

- B. Provide grounding with Ground rod of length specified to achieve a ground resistance of 25 ohms or less. If 25 ohms is not reached with one rod, additional rods connected in parallel will be required. Provide additional rod a minimum of 20 feet from first ground rod. Provide proposed extra charge for the additional ground rod.
- C. Bond the non-current carrying parts of all electrical equipment installed under this contract including metallic raceways, raceway supports, motors, equipment enclosures, and metallic cable sheaths by means of bare copper cable or copper strap to the station grounding system.
- D. Ground conductors are to be securely connected inside the junction boxes or enclosures. Ground conductors to be terminated at the ground bus. Splices in ground conductors shall be made by the "Cadweld" process by Erico products, Inc., Continental Industries "Thermoweld", or equal.
- E. Bond grounding conductor from lightning arrester to ground rod systems.

SECTION 16530**SITE LIGHTING****PART 1 - GENERAL****1.01 SECTION INCLUDES:**

- A. The work includes site lighting.

1.02 WARRANTIES:

- A. All site lighting units shall be fully warranted against defective workmanship and materials for a period on one year.

PART 2 - PRODUCTS**2.01 SITE LIGHTING:**

- A. Provide one (1) 40 ft. (nominal) wood pole to provide 30 ft. mounting height for luminaire.
- B. Ballast for the luminaire shall be integral with luminaire shall be reactor lag type, be capable of starting lamp at temperatures of -20° F with a line voltage variation of plus 10% and minus 10% from line voltage.
- C. Site Lighting Fixture Schedule:

Type	Description	Total W	LAMP			Mounting
			No.	W	Type	
1	GE 2015A W 24" mounting bracket, integral pre-wired photocell, with IES, Type 5 light distribution including lamp	171	1	150	HPS	30' MH on wood pole

PART 3 - EXECUTION**3.01 INSTALLATION:**

- A. All site lighting shall be installed in accordance with NEC and manufacturers recommendations.
- B. Provide connection from 15A 1P circuit breaker in load center to pole and luminaire using #12/2C W ground type UF cable. Provide protection for type UF cable on vertical runs above grade.

**WW ENGINEERING AND SCIENCE
ARCS PROGRAM MANAGEMENT OFFICE
U.S. EPA CONTRACT NO. 68-W8-0079**

CERTIFICATION OF NONSEGREGATED FACILITIES

(a) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(b) By the submission of this offer, the Offeror certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.

(c) The Offeror further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will --

- (1) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;
- (2) Retain the certifications in the files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certification for specific time periods):

**NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT
FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES.**

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract under which the subcontractor will be subject to the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semi-annually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

Company: _____

Signature: _____

Title: _____

Date: _____

**WW ENGINEERING AND SCIENCE
ARCS PROGRAM MANAGEMENT OFFICE
U.S. EPA CONTRACT NO. 68-W8-0079**

PREVIOUS CONTRACTS AND COMPLIANCE REPORTS

The Offeror represents that --

(a) It ____ has, ____ has not participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114;

(b) It ____ has, ____ has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

Company: _____

Signature: _____

Title: _____

Date: _____

**WW ENGINEERING AND SCIENCE
ARCS PROGRAM MANAGEMENT OFFICE
U.S. EPA CONTRACT NO. 68-W8-0079**

CLEAN AIR AND WATER CERTIFICATION

The Offeror certifies that --

- (a) Any facility to be used in the performance of this proposed contract is ____ is not ____ listed on the Environmental Protection Agency List of Violating Facilities;
- (b) The Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the Environmental Protection Agency, indicating that any facility that the Offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and
- (c) The Offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

Company: _____

Signature: _____

Title: _____

Date: _____

**WW ENGINEERING AND SCIENCE
ARCS PROGRAM MANAGEMENT OFFICE
U.S. EPA CONTRACT NO. 68-W8-0079**

**CERTIFICATION REGARDING DEBARRED,
SUSPENDED AND INELIGIBLE CONTRACTORS**

The Offeror certifies that his firm is not included or pending inclusion on the Consolidated List of Debarred, Suspended, and Ineligible Contractors.

Company: _____

Signature: _____

Title: _____

Date: _____

WW ENGINEERING AND SCIENCE
EPA Contract No. 68-W8-0079
Business Classification Certification

The undersigned certify that our company is a :

- ☐ Small Business (SB)
- ☐ Small Disadvantaged Business (SDB)
- ☐ Women-Owned Business (WOB)
- ☐ Not a SB, SDB, or WOB

8(a) Certified

☐ Yes

☐ No

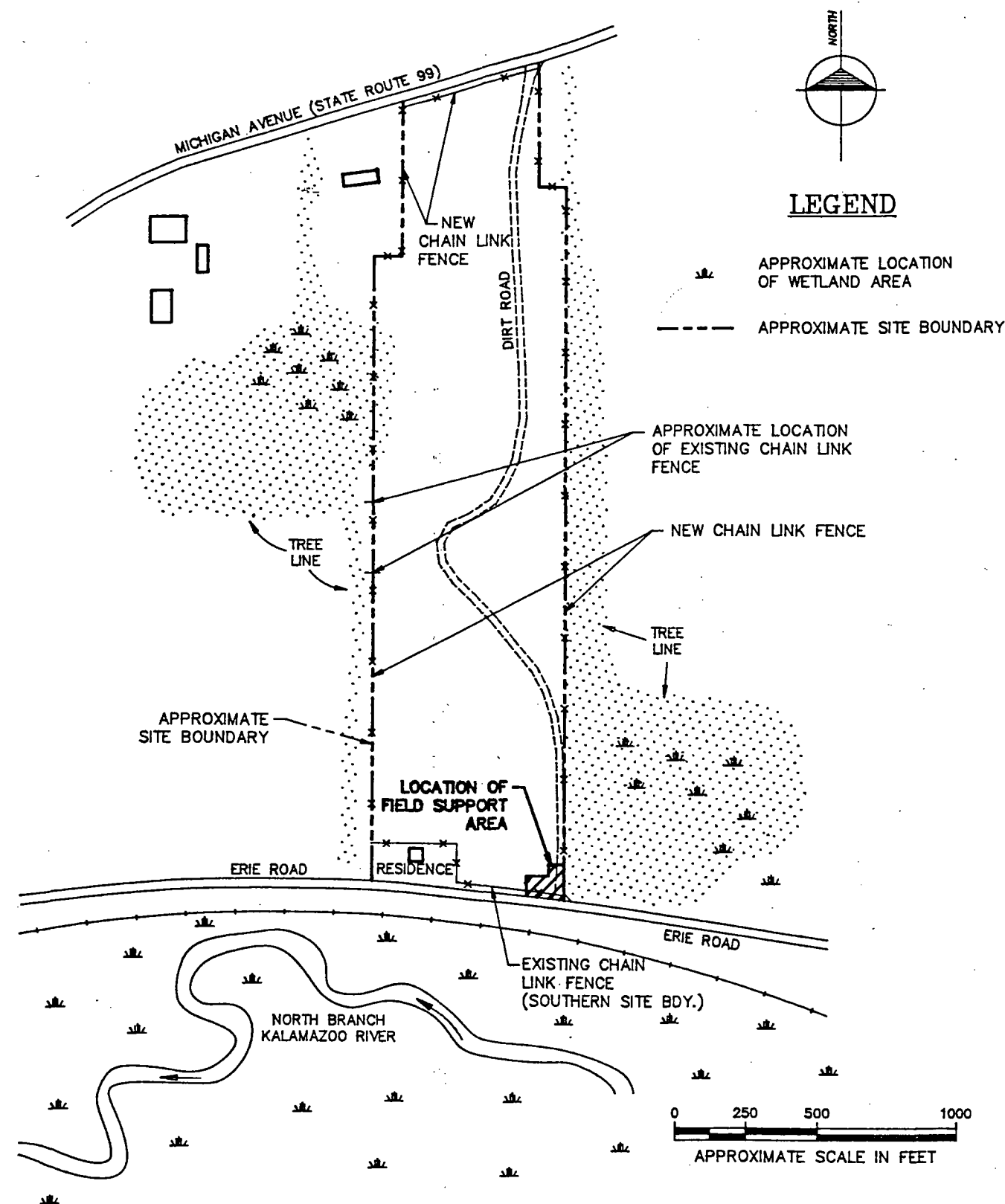
Company Name: _____

Address: _____

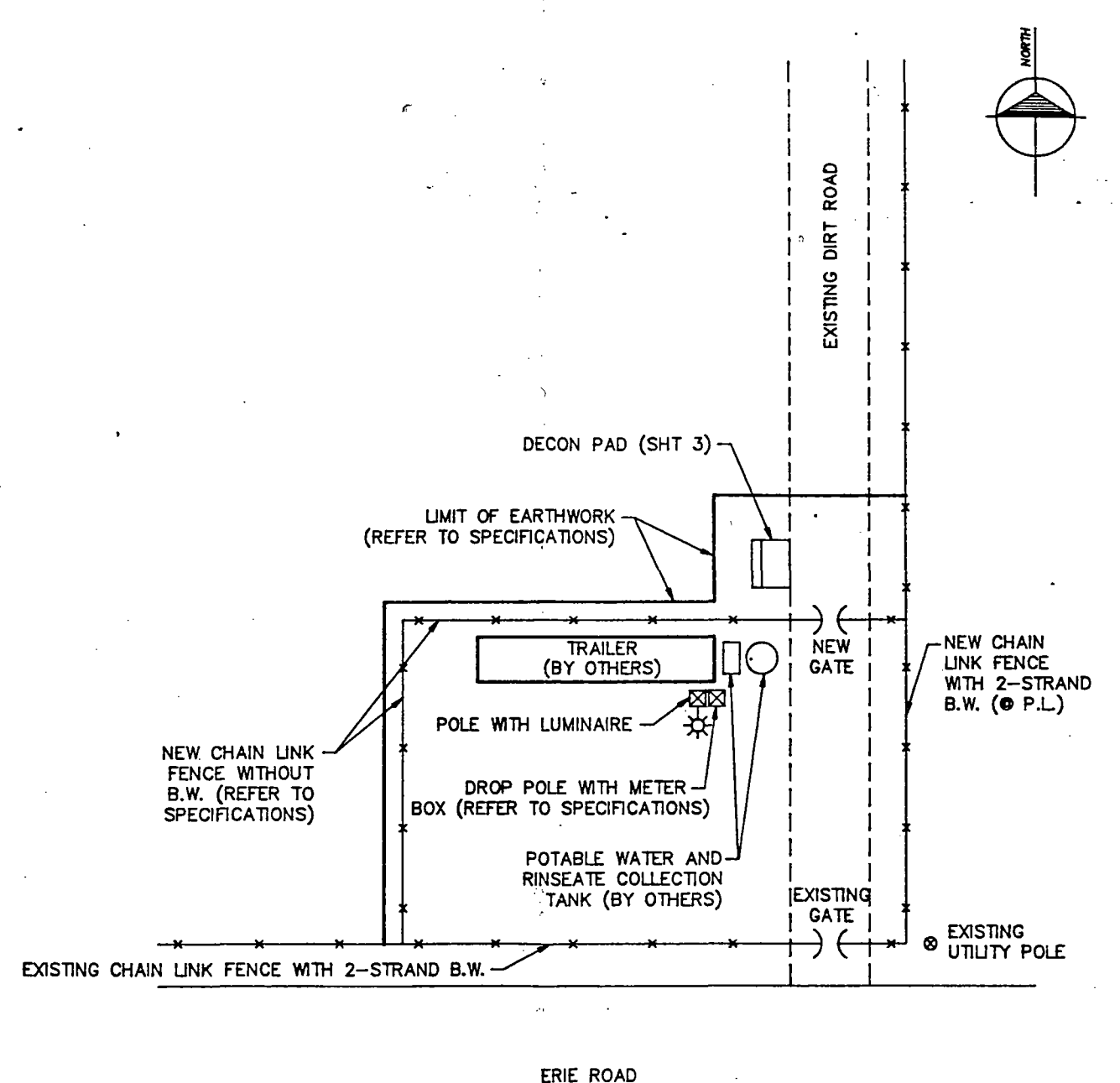
Company Official Signature: _____

Title: _____

Date: _____



SITE PLAN VIEW



FIELD SUPPORT AREA PLAN VIEW

04011SPV
VR060992

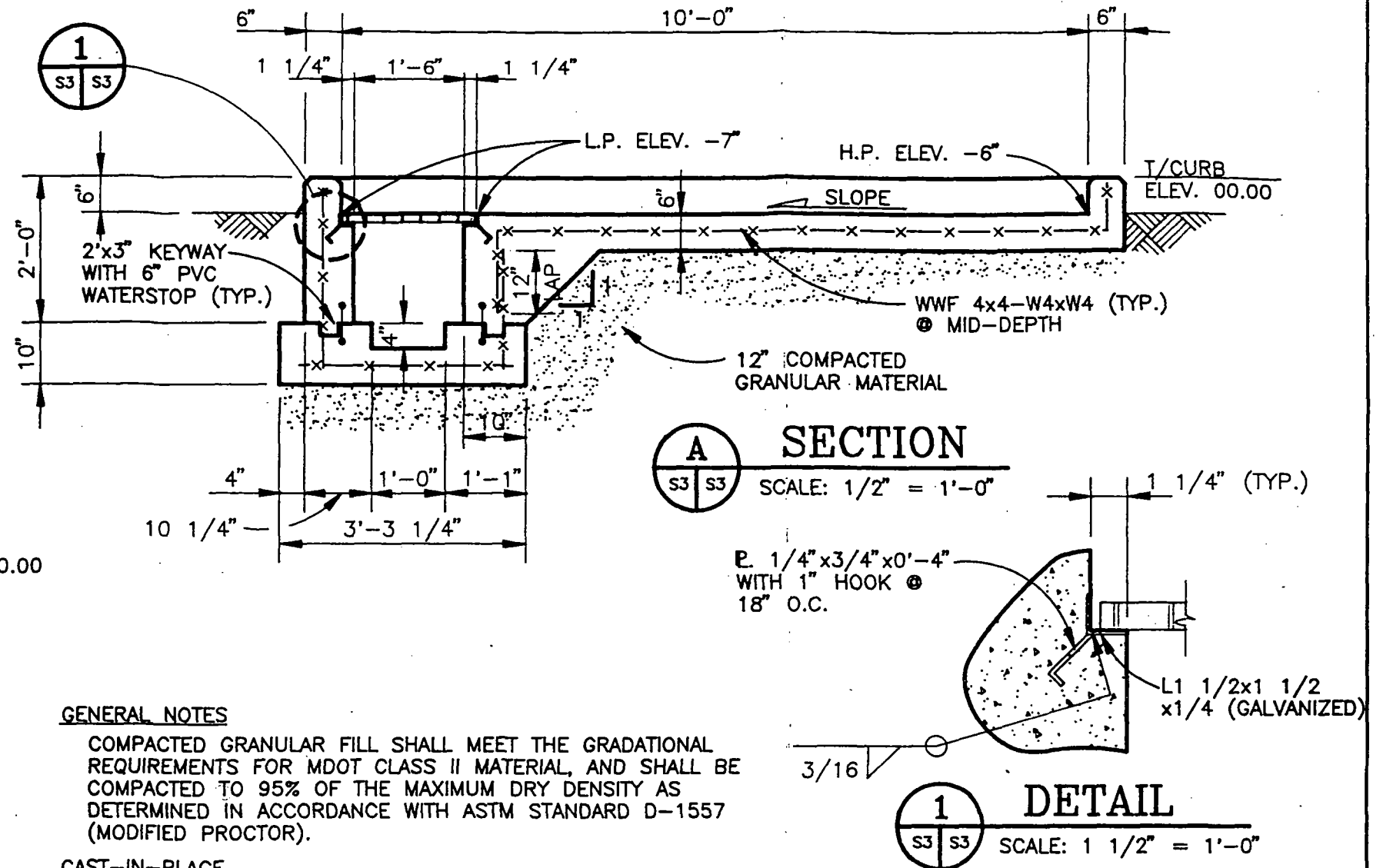
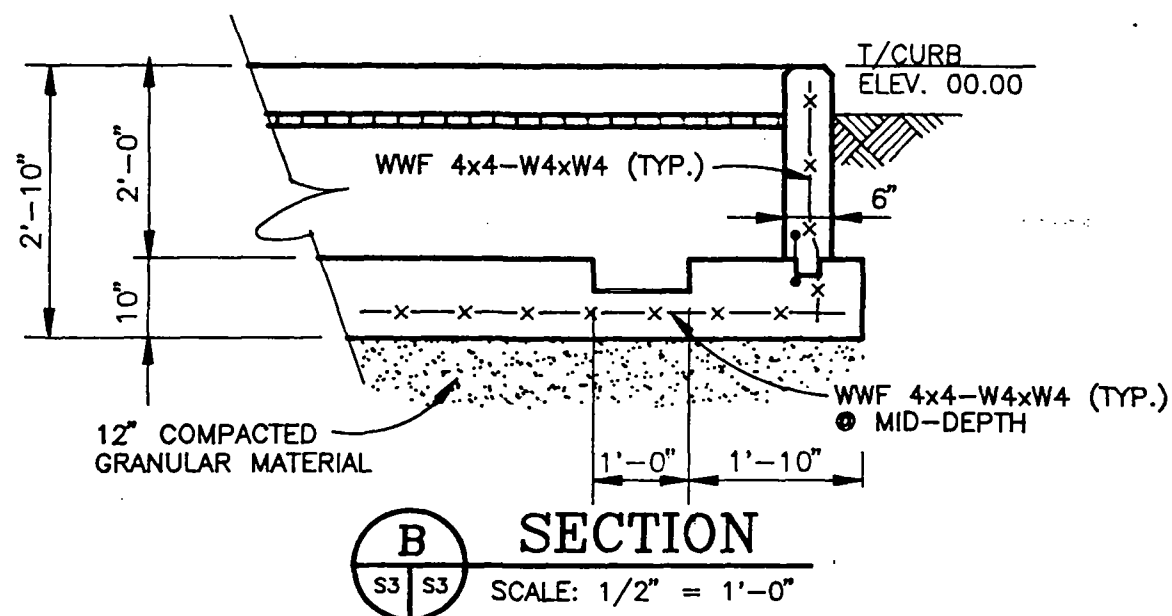
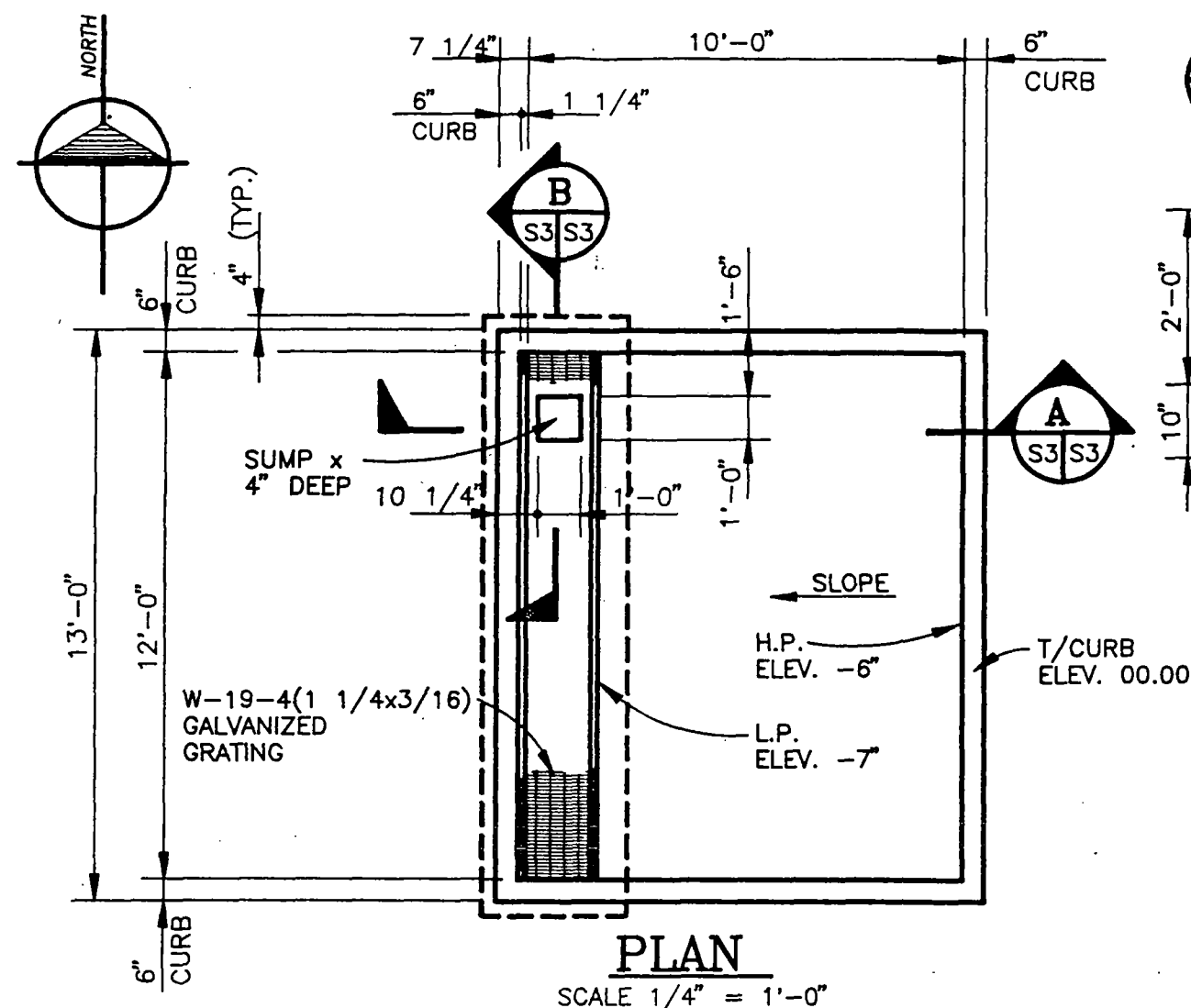
SHEET 2

SITE PLAN VIEW

ALBION-SHERIDAN TOWNSHIP LANDFILL
ALBION, MICHIGAN

JUNE, 1992

04011.02



GENERAL NOTES

COMPACTED GRANULAR FILL SHALL MEET THE GRADATIONAL REQUIREMENTS FOR MDOT CLASS II MATERIAL, AND SHALL BE COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM STANDARD D-1557 (MODIFIED PROCTOR).

CAST-IN-PLACE

PROVIDE 1" BEVELED EDGES ON ALL PERMANENTLY EXPOSED SURFACES OF CONCRETE SLABS & STRUCTURES.

MINIMUM COMPRESSION STRENGTH(F'_c): 4,000 PSI.

MINIMUM CEMENT CONTENT: 6.0 SACKS PER CUBIC YARD FOR 4000 PSI.

MAXIMUM SLUMP: CONCRETE SLABS 3 1/2".

ENTRAINED AIR: 5 TO 8%

AGGREGATE: COURSE - MDOT 6AA; FINE - MDOT 2NS.

WELDED WIRE FABRIC (FLAT SHEET) SHALL CONFORM TO ASTM 185.

CONCRETE FINISH: CONCRETE SLAB SHALL HAVE A TEXTURED BROOM FINISH.

ALL CONCRETE CONSTRUCTION SHALL COMPLY WITH ACI "SPECIFICATIONS FOR STRUCTURAL CONCRETE" 301-84.